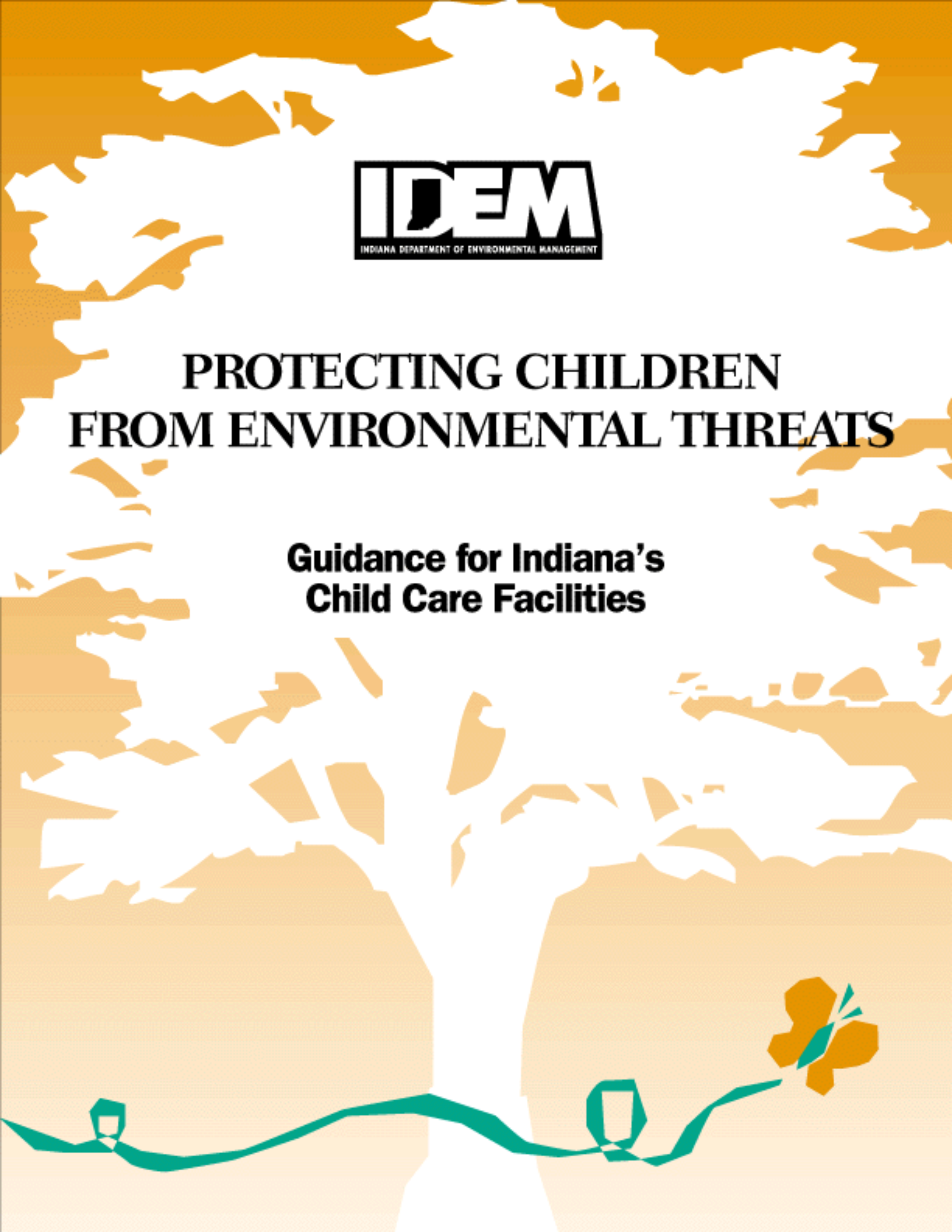

PROTECTING CHILDREN FROM ENVIRONMENTAL THREATS

Guidance for Indiana's Child Care Facilities

IDEM Commissioner Lori F. Kaplan

Dear Child Care Provider:

The health of our children is a concern we all share. The air we breathe, the water we drink, the land where we build our homes, affect children's health perhaps more than we are aware.

Children in particular are susceptible to threats in the environment because their central nervous system and organs have not created the protective barriers that most adults develop. For instance, since children do not have fully developed blood brain barriers, mercury passes easily to the central nervous system. Lead in paint and drinking water can show up in children as learning disabilities, hyperactivity, or convulsions.

Must we live and work in constant fear? Absolutely not. Should we be concerned and act judiciously? Yes. Mostly, we need to be educated. As child care providers, you have a unique opportunity to educate yourselves, staff, and families on the many steps we all can take to protect children from threats in the environment. Many of these measures are simple--like running the cold water tap for 30 seconds every six hours to make sure any lead deposits are flushed out, or running the vacuum cleaner when children are not present.

This guide is a companion piece to the *Self Assessment for Child Care Facilities and 5-Star Environmental Recognition Program.* To enhance these tools, this comprehensive manual will educate you on potential environmental health risks that may be present in your facility and specific steps to address them. In addition to environmental protection, we've included sections on safety, sanitation, and educational tools for children and parents.

Ensuring a healthy future for our children is a responsibility we all share. Educating yourself and your families on environmental problems will create cleaner, healthier communities throughout Indiana. Thank you for caring about the health and well-being of Indiana's children.

Sincerely,

Lori F. Kaplan
Commissioner
Indiana Department of Environmental Management

Acknowledgments

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Beth Admire, Indiana Department of Environmental Management
Debbie Beeler, Hoosier Uplands Children's Services Division
Jacqueline Blackwell, Ph.D, Indiana University-Purdue University School of Education
Dorothy Broad, R.N., Family and Social Services Administration
Julie Butwin, R.N., Indiana State Department of Health
Lisa Cauldwell, Marion County Health Department
Ellen Clippinger, National School-Age Alliance
Victoria Cluck, Indiana Department of Environmental Management
Roselyn Cole, Ph.D, Auntie Mame's Child Development Center
Tim Crouse, Indiana Occupational Safety and Health Administration
Scott Draschil, Indiana Department of Environmental Management
Patsy Elliot, National Academy of Early Childhood, Indiana Chapter
Amy Farrell, Indiana University School of Public and Environmental Affairs
John Ellis, M.D., Medical Director, Methodist Risk-Based Managed Care Network
John Emerson, Family and Social Services Administration
Stephanie Gardner, Family and Social Services Administration
Dawn Harvey Horth, Cinergy Corp.
Marsha Hearn-Lindsey, Day Nursery
Stacy Jones, Indiana Department of Environmental Management
Jean Casmir, Little Dove Daycare, East 10th United Methodist Church
Kathy Klatte, Day Nursery Medical Center at Wishard Hospital
Marc Lame, Ph.D, Indiana University School of Public and Environmental Affairs
Jack Leonard, Ph.D., Environmental Management Institute
Terry Lumish, Indiana University School of Public and Environmental Affairs
Tom Neltner, Improving Kids' Environment
Judy Nevins, Discovery Child Development Center
Cathy Nordholm, Indiana State Department of Health
Frank Profit, Indiana Department of Environmental Management
Christy Prulhiere, Community Child Care Center
Gary Rogers, Family and Social Services Administration
John Ruyack, Indiana State Department of Health
David Scott, Office of the State Chemist
Mara Snyder, Fire and Building Services
Michele Starkey, Indiana State Department of Health
Carole Stein, Family and Social Services Administration
Marsha Thompson, Indiana Association for Child Care Resource & Referral
Diana Wallace, Indiana Youth Institute

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
PROJECT LEADERSHIP

Lori F. Kaplan, Commissioner
Angela Spittal, Chief of Staff
Paula Smith, Acting Assistant Commissioner, Office of Pollution Prevention and Technical Assistance
Tamara Johnson, Children's Health Coordinator
Karen Teliha, Coordinator, 5-Star Environmental Recognition for Child Care Facilities
AmeriCorp Members: Dymisha Adamson, Anthony Clemons, Audley Edwards, Jorie Johnson, Kim Meals, Tamika Pettigrew, Mary Weston

Leslie Flowers, Writer and Editor

Asher Agency, Design

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ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
ANSI	American National Standards Institute
BTU	British Thermal Unit
CFL	Compact Fluorescent Lamp
CPR	Cardiopulmonary Resuscitation
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
EREN	Energy Efficiency and Renewable Energy Network
FDA	Food and Drug Administration
FSSA	Family and Social Services Administration
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
HVAC	Heating Ventilating Air Conditioning
IDEM	Indiana Department of Environmental Management
IOSHA	Indiana Occupational Safety and Health Administration
IPM	Integrated Pest Management
ISDH	Indiana State Department of Health
MSDS	Material Safety Data Sheet
NSF	National Sanitation Foundation
OSHA	Occupational Safety and Health Administration (Federal)
OSFM	Office of the State Fire Marshal
PCB	Polychlorinated Biphenyl
pCi/L	Picocuries per liter
UL	Underwriters Laboratory
USDA	U.S. Department of Agriculture
WWW	World Wide Web

Chapter 1 Introduction

How to Use This Guidance Manual

This guidance manual is for anyone who operates a child care facility in the state of Indiana. In fact, it's applicable for anyone who cares for children. Many of us involved in the production of the manual have changed behaviors in our own homes-from flushing out the cold water tap in the morning, to identifying materials that contain mercury, to wet dusting window sills and doors that may have coats of lead-based paint.

This guidance manual attempts to explain in clear, understandable terms the rules and regulations of several Indiana agencies that regulate to child care facilities, including:

- Indiana Department of Environmental Management (IDEM)
- Family and Social Services Administration (FSSA)
- Indiana State Department of Health (ISDH)
- Office of the State Fire Marshal (OSFM)
- Indiana Occupational Safety and Health Administration (IOSHA)

Who is Regulated?

We address three types of facilities specifically in the guidance manual because they are the only types regulated by the Bureau of Child Development of the Family and Social Services Administration.

1. Licensed Child Care Centers

- Child care provided in a commercial building for regular compensation
- Children are unattended by a parent, legal guardian, or custodian
- Care is provided for more than four hours, but less than 24 hours, for 10 consecutive week days, excluding holidays.

2. Licensed Child Care Home

- A residential structure in which at least six children (excluding owner's children or relatives) receive care for regular compensation
- Children are unattended by a parent, legal guardian, or custodian
- Care is provided for more than four hours, but less than 24 hours, for 10 consecutive week days, excluding holidays
- Term applies to Class I (12 full- + 3 part-time or fewer children) and Class II (more than 12 full-time children).

3. Registered Child Care Ministry

- Child care facility operated by a church or religious ministry that is a religious organization exempt from federal income taxation under Section 501(c)(3) of the Internal Revenue Code.

If you fit the above criteria for any of the three types of facilities and you are not licensed or registered, YOU ARE OPERATING ILLEGALLY! Not only are you breaking the law, you are missing a business opportunity. Licensing or registration assures parents you are meeting the minimum requirements to operate your facility. In addition, you may be eligible for government subsidies, including food reimbursement; you can more easily obtain appropriate insurance coverage; and you may be eligible for tax deductions as a legitimate business operator.

Child Care Facility

The term "child care facility" is used throughout this manual to encompass licensed child care centers, licensed homes, and registered ministries. Since FSSA regulates these facilities, they must follow the most rules and regulations. This guidance manual is designed to help these facilities understand what they MUST do as required by law, what they SHOULD do to go above and beyond what is required to protect their children, and what they should CONSIDER to really go the extra mile. The above icons (apple, teddy bear, or block) will help you identify which type of facility (center, home, or ministry, respectively) must comply with the rules and regulations explained in this manual.

While we address only regulated facilities in this manual, all child care providers can benefit from the guidance provided within these pages. Just because one requirement isn't a MUST for you doesn't mean you can't or shouldn't do it. For instance, even though child care homes can spray pesticides legally when children are present doesn't mean they should. Although child care ministry staff does not have to receive first aid training or lock poisonous chemicals, it is highly recommended. The rules and regulations give you a baseline on which you can build to protect your children.

If you have any questions about the enclosed material, would like confidential on-site or phone assistance, or need information on the 5-Star Environmental Recognition for Child Care Facilities, please call IDEM's Office of Pollution Prevention and Technical Assistance at (800) 988-7901. We're here to help!

Notice

The information compiled in this manual is being provided by IDEM, FSSA, IOSHA, and the state Fire Marshal as general guidance to childcare facilities in Indiana. Although every effort has been made to ensure the accuracy and completeness of this information, the authors and reviewers of this publication cannot guarantee that it is completely free of any errors or omissions. It is ultimately the responsibility of the owner and operator of each facility to ensure that the facility complies with all applicable regulations.

Chapter 2 Environmental Threats

This chapter explains how several key environmental toxins affect children. Each section contains information on the hazards of the environmental threat, where it can be found, and three types of guidance:

1. What the law states you **MUST** do.

2. What you **SHOULD** do beyond what is required by law to further protect your children and staff.

3. What you should **CONSIDER** to stand out as an environmental and safety steward in your community.

2.1 LEAD

About one in six children in America have high levels of lead in their blood, according to the Agency for Toxic Substances and Disease Registry. In Indiana, according to 1994-1998 baseline data from the Indiana Childhood Lead Poisoning revention Program, 9.8% of 171,590 children screened under or equal to six years of age had an initial blood lead level above 10 ug/dL (micrograms per decilieter of whole blood). Blood lead levels as low as 10 ug/dL are associated with harmful effects on children's learning and behavior.

Lead is more dangerous to children than adults because children's growing bodies absorb more lead, and their nervous systems and brains are more sensitive to lead's damaging effects. Babies and young children put most everything in their mouths, and these objects may have lead dust on them.

Lead-based paint in older homes or other facilities is the most important remaining source of lead exposure for U.S. children. U.S. EPA banned lead from paint in 1978. Lead-based paint most likely will be present in your facility if it was constructed or renovated before 1978, especially if it was built before 1950.

Facilities hooked up to private well-water systems may be at greater risk for lead in drinking water than facilities hooked up to public utilities. The best way to evaluate your facility's risk for lead is to walk through the lead section in IDEM's Self Assessment booklet.

Health Effects
The long-term health effects of lead in children can be severe, and even result in death. Even small amounts can impact a child's healthy development. Research has demonstrated that childhood exposure to unsafe lead levels can cause learning disabilities, decreased growth, hyperactivity, dizziness, clumsiness, impaired hearing, brain damage, paralysis, and convulsions. In pregnant women, lead exposure can pass through the body to the unborn child, resulting in miscarriage or birth defects.

WATCH FOR THE SIGNS OF LEAD POISONING:

- flu-like symptoms
- abdominal pain/discomfort
- headaches
- anemia
- weakness
- vomiting
- fatigue
- sleep disorders
- hyperactivity
- poor appetite
- constipation
- weight loss
- seizures
- coma
- loss of hearing
- diminished motor skills
- diminished mental capacity
- damage to organs
- emotional behavior
- Attention Deficit Disorder
- paralysis
- death

Some parents and teachers may regard these signs as "just part of growing up." However, lead poisoning symptoms should not be ignored. The only way to know if a child has lead poisoning is through proper blood testing.

Where is lead?

You may have lead around your building without knowing it because you can't see, taste, or smell lead. Lead can be in:

- dust
- paint
- soil
- pipes
- drinking water
- mini-blinds
- food made with lead-contaminated water
- imported ceramic dishware and crystal glassware

Before scientists, health practitioners, and policy makers knew about lead's harmful effects, it was used widely in paint, gasoline, water pipes, mini-blinds, and many other products. Now that the dangers of lead are known, most paint is lead-free, leaded gasoline is being phased out, and household plumbing no longer is made with lead materials. However, if lead is present in your facility, it will not break down naturally. Lead remains a potential hazard until it is contained safely or removed properly.

Lead-based paint

Children are exposed to lead-based paint when they eat lead-based paint chips or inhale or ingest lead-based paint dust. Most businesses and homes built before 1950 contain heavily leaded paint. Some buildings constructed as recently as 1978 also may contain lead-based paint. This paint may be on window frames, window sills, walls, doors, door frames, stairs, railings, banisters, shelves, or bookcases. Outside, it can be found on porches, fences, on your facility's exterior, in the soil, or on your neighbor's property.

Lead dust is a poison. It can form when lead-based paint is dry scraped or heated. Dust also forms when surfaces covered with lead-based paint are bumped or rubbed, such as opening a window or door. Settled lead dust can re-enter the air when you vacuum, sweep, or walk through an area. Children can inhale or ingest lead when they put their hands in their mouth after crawling on the carpet or floor where lead dust has been tracked.

Lead in soil can be a hazard when children play in bare soil. Also, people can bring lead-contaminated soil inside on their shoes, impacting indoor areas where children crawl and play. Lead in soil can come from paint chips that fall off your facility, a neighboring building or fence, dust from the house exterior, air deposits of leaded gasoline vapors, or discharges from lead smelters.

Lead-based paint that has been covered by several layers of water-based paint usually is not a hazard unless the paint is cracking or peeling. However, in friction areas, such as where doors and windows open and close, dust from lead-based paint, even several layers down, can be emitted into the air children breathe.

Fortunately, reducing the risk of lead poisoning in children is relatively simple and inexpensive, as the following requirements and recommendations demonstrate.

You MUST:

- **Ensure that all equipment, surfaces, and items with which employees and children come in contact, including toys, cribs, jumpers, and play pens, are free of lead-based paint chips or dust.** (OSHA, FSSA) If during an inspection, FSSA finds that lead-based paint is a threat to children and staff, you will have to present a plan for repair to the Child Care Health Section at FSSA. Contact FSSA for guidance.

- **Use a licensed contractor to remove lead-based paint if the intent is to remove the paint permanently.** (IDEM) It takes a properly trained expert to remove lead-based paint correctly. Some of the hazards of improper lead-based paint work:
  - < Dry scraping or sanding lead-based paint can generate large amounts of lead dust
  - < Heating lead-based paint may release dust into the air
  - < Ingesting lead-based paint or inhaling vapors can occur during improper cleanup activities
  - < Lead dust from poorly done repairs or renovations of older buildings can remain in the building long after the work is completed.

It is highly recommended that you also use licensed contractors for other lead-based paint activities because of the inherent dangers of lead-based paint, although the law does not require it. Licensed lead-abatement contractors have been trained in proper lead removal. IDEM maintains a list of licensed contractors who have been trained and certified to remove lead-based paint. Call IDEM's Asbestos/Lead Section at (800) 451-6027, ext. 33861 or (317) 233-3861 for the most current list.

(any facility that has one or more employees)

- **During renovations, repair, or cleaning activities, you must protect your employees and construction workers, in addition to children.** (OSHA) Employers must protect employees from exposure to airborne concentrations of lead above 50 micrograms per cubic meter of air (50 ug/m^3) over an 8-hour period. Call OPPTA to determine what protective equipment is necessary for varying levels of work on lead-based painted surfaces.

- **Inform employees if there is a potential exposure to any level of airborne lead.** (OSHA) You must explain the hazards of lead exposure to employees if there is any potential for exposure.

- **Perform any alterations or renovations without children or staff present.** (FSSA, OSHA) Children and pregnant women are especially at risk if exposed to unsafe levels of airborne lead.

You SHOULD:

- **Test at-risk children.** At-risk children are those who:
  - live in low-income communities
  - live or play in older housing, especially if the home is in poor condition or undergoing renovation
  - have brothers, sisters, or playmates with high lead levels
  - live with someone who is exposed to lead in the workplace or who has a hobby that uses lead (stained glass, pottery, etc.)
  - live near a lead smelter, battery recycling plant, or other industry that releases lead into the air
  - use hot water from the tap for cooking or drinking
  - have a low iron count
  - eat, drink, or cook from pottery or ceramicware containing lead.

  Encourage parents of children who may have been exposed to lead to get their children tested by their doctor, health center, or local health department. A simple blood test can detect high lead levels. These tests are inexpensive and sometimes free. Blood tests for lead are especially important for children between six months to six years of age. Treatment can range from changes in diet, to medication, or even a hospital stay in severe cases.

- **Leave lead-based paint alone before covering it.** Leave lead-based paint undisturbed if it is in good condition. DO NOT SCRAPE, SAND, OR BURN lead-based paint. Chemical removers involve a wet removal process, which is preferred; however, all chemical removers involve hazardous chemicals. Follow directions carefully and use the recommended protective equipment when using chemical removers. Remember, a licensed contractor must perform all lead-based paint removal activities if your goal is permanent removal. Contact IDEM for a list of certified contractors.

- **Cover lead-based paint.** If you are not removing lead-based paint permanently, enclose the undisturbed lead-based paint with water-based paint, wall paper, or contact paper. Remember, covering high-friction areas, such as window sills, window frames, and door frames, will not prevent lead dust emitted from the lead-based paint underneath. NOTE: it is against licensing or registration regulations to do this work when staff or children are present.

- **Contact your landlord.** If you rent, notify your landlord of peeling or chipping paint.

- **Discard paint chips safely.** Clean up lead-based paint chips immediately with ***wet*** paper towels. When the paint chips or dust are wet, they will not emit lead dust. Discard in double-layered heavy-duty trash bags. Add enough water to the trash bag to dampen the paint chips and seal bags tightly. Discard bags in your normal trash collection

- **Dust with wet rags or mops.** Clean window frames, window sills, and other surfaces that create friction when opened with wet rags or mops as often as necessary to pick up small chips or dust. Also clean the floor, rug, or carpet around these friction areas. Use a mop or sponge with warm water and a general all-purpose cleaner. Thoroughly rinse sponges and mop heads with dish soap or an all-purpose cleaner after each cleaning.

- **Wet clean carpets annually.** Wet cleaning carpets where lead dust may accumulate will reduce children's exposure to lead paint dust. However, make sure the carpeting dries thoroughly to prevent mold, which can cause asthma or irritate allergies (For more on respiratory irritants, see Section 2-4).

- **Wash hands.** Children put just about anything in their mouths, including soil or paint chips. If your facility is at risk for lead contamination, wash children's hands often, especially before they eat, and before nap time and bed time. Prevent children from chewing or sucking on window sills, banisters, or other painted surfaces.

- **Use low-odor, water-based paints.** The paint should be dry and vapor smells nondetectable before children re-enter newly painted rooms.

- **Clean toys.** Keep play areas clean. Wash and sanitize bottles, pacifiers, toys, and stuffed animals regularly.

- **Use a door mat and wipe your shoes.** Clean or remove shoes before entering the facility to avoid tracking in lead from potentially contaminated soil. Wash the door mat regularly (do not shake it out where children play!) to help keep contaminants out of the building.

- **Check your mini-blinds.** If you have mini-blinds, contact the manufacturer to ensure your blinds are lead free. Replace mini-blinds that contain lead. Dust mini-blinds with a wet cloth if they contain lead or if you are not sure if they contain lead.

- **Eat healthfully.** Make sure children eat nutritious, low-fat foods that are high in iron and calcium. Examples include: spinach, low-fat dairy products, tofu and lean meats, such as pork. Children with healthy diets will absorb less lead.

- **Test your soil if your facility is located near a lead smelter.** If your facility is located near manufacturers that use large amounts of lead, you should test your soil. Indiana has only a few lead smelters, including RSR Quemetco Inc. in Indianapolis; Exide Corp. in Muncie; and Hammond Lead Products Inc. in Hammond.

You should CONSIDER:

- **Getting a lead risk assessment.** Have your facility and soil checked for lead hazards through a lead risk assessment. Lead risk assessors will take dust wipe, peeling paint, soil, and water samples for lab tests. If you do choose to have a lead risk assessment, it must be conducted by a licensed individual (see Chapter 7: Resources).

IDEM IS OFFERING FREE LEAD RISK ASSESSMENTS TO CHILDCARE FACILITIES PARTICIPATING IN THE 5-STAR ENVIRONMENTAL RECOGNITION PROGRAM.

AN ASSESSMENT INCLUDES PAINT, WATER AND OTHER LEAD-BASED PRODUCTS. FOR MORE INFORMATION CALL (800) 988-7901.

LEAD IN DRINKING WATER

High levels of lead in drinking water are a significant source of lead exposure for children. Lead levels are likely to be high if your facility has any of the following:

- lead pipes
- copper pipes with lead solder (material used to unite pipes)
- brass faucets or fittings.

Even if you are connected to a city or town water supply, which treats drinking water for contaminants, lead still can enter your drinking water through your facility's own plumbing.

A surprising fact--data indicate that the newer the building, the greater the risk of lead contamination in the water. Why? Lead levels in water pipes decrease as the building ages. Over time, mineral deposits coat the inside of pipes, which insulate the water from the solder. During the first several years after construction, before this coating forms, water is in direct contact with the lead in the solder. This coating may form more rapidly if you have hard water.

Facilities that are very old also are at high risk for lead-contaminated drinking water. Plumbing installed before 1930 most likely contains lead pipes or solder. Copper pipes have replaced lead pipes in most plumbing; however, the use of lead solder to connect the pipes is widespread. In fact, experts regard lead solder as the major cause of lead contamination in drinking water today.

U.S. EPA's Office of Ground Water and Drinking Water reports that brass fittings and plumbing fixtures that contain 8% or less lead have been found to contribute high lead levels for a considerable period of time after their installation. To learn if your brass faucet meets safe drinking water standards, contact the NSF (National Sanitation Foundation) International at (800) NSF-MARK or www.nsf.org, or Underwriters Laboratory (UL) at (847) 272-8800 or www.ul.com .

You should be concerned that your water may have lead contamination if:

< your pipes or solder at the main shutoff valve are a dull gray metal that is soft enough to be scratched with a house key (these are probably lead pipes)
< you see signs of corrosion, such as frequent leaks
< your non-plastic plumbing was installed before 1986, the year lead solder was banned.

You MUST:

‘ **Test for lead in your drinking water if your facility is served by a well and you have more than 25 people in your facility.** (IDEM) Contact IDEM's Drinking Water Branch, (317) 308-3282, to learn about the testing and monitoring requirements. Several factors determine these requirements, such as building occupancy and location. If your facility is hooked up to a city or town water supply then no testing is required, unless the Indiana State Department of Health notifies you otherwise.

‘ **Use lead-free pipes and materials in new construction.** (U.S. EPA) There are no state or federal laws that require businesses or homes to address lead in drinking water. However, under the Safe Drinking Water Act, U.S. EPA requires that utilities must ensure that water from a customer’s tap does not exceed 15 parts per billion of lead to water. In 1986, President Reagan signed amendments to the Act, requiring that “lead-free” pipes, solder, and flux must be used in the *installation or repair* of any public water system or plumbing in residential or non-residential facilities connected to a public water system. This ban of lead material in drinking water systems applies only to *new* plumbing or repairs-not existing plumbing structures or pipes.

You SHOULD:

- **Flush your pipes before drinking or cooking.** Whenever water in a faucet has not been used for six or more hours, "flush" the cold-water pipes by running the water at least 30 seconds or until it becomes as cold as it will get. This could take as little as five to 30 seconds if there has been recent heavy water use, such as showering or toilet flushing. The more time the water has been in contact with pipes or fixtures containing lead, the more lead it may contain.

- **Use cold water for drinking or food preparation.** Use water from the cold-water tap only for drinking, cooking, and especially for making infant formula. Hot water can contain higher lead levels because lead dissolves more quickly in hot water. If you need hot water, draw water from the cold water tap then heat it. Boiling water will not eliminate lead contamination.

- **Get your water tested.** The only way to be sure of the amount of lead in your water is to have it tested by the Indiana State Department of Health, local health departments, or a laboratory certified by the Indiana State Department of Health. For more information on drinking water testing, contact:
  - Indiana Family Helpline at (800) 433-0746
  - Indiana Department of Environmental Management, Office of Water Management, Drinking Water Branch, 2525 North Shadeland Ave., P.O. Box 7148, Indianapolis, IN 46207-7148, Contact: Stacy Jones, (317) 308-3292
  - Indiana State Department of Health web site at: www.state.in.us/doh/html/labserv/certfr.htm
  - Your public water supplier.

You should CONSIDER:

- **Contacting your utility.** If you are served by a city or town water system, contact your supplier (the company on your water bill) and ask whether or not the supply system contains lead service lines, or if the system has been tested for lead. If either answer is yes, ask what the lead levels are in the system. If the levels are equal to or greater than 15 parts per billion, ask what steps the supplier is taking to address the lead contamination. Drinking water can be treated at the plant to make it less corrosive, and water mains and connections containing lead under the jurisdiction of the supplier can be replaced.

- **Treating your well.** If you own a well or another water source, you can treat the water to minimize lead contamination. IDEM recommends using corrosion control products. Contact your local county health department, NSF (National Sanitation Foundation) International, the Indiana State Department of Health, or IDEM's Drinking Water Branch for assistance in finding these commercially available products (see Chapter 7: Resources).

OTHER POTENTIAL LEAD SOURCES:

Glazed pottery: Use glazed pottery only for display and keep out of children's reach, if you do not know whether it contains lead.

Leaded crystal glassware or stemware: Use leaded crystal glassware or stemware only for display and keep out of children's reach, if you do not know whether it contains lead.

Leaded gasoline fumes: Facilities that have bare soil in outdoor playgrounds located near parking lots or busy streets should test soil for lead. Leaded gasoline fumes may have deposited lead in the soil before 1978, when leaded gasoline was banned.

On the job: If employees' or parents' work or hobbies involve lead, they should change clothes and remove shoes before entering a child care facility. Their work clothes should be washed separately from children's laundry.

Food cans: Never store food in open cans; keep it in glass, plastic, or stainless steel containers. The lead solder used to seal food cans can mix with the food in the can. The United States banned the use of lead solder in cans in 1995, but still is used in other countries. Lead solder may be found in cans imported into the United States.

2.2 ASBESTOS

Asbestos is a mineral fiber the building and construction industry used in more than 3,000 different building products, including: pipe and furnace insulation, shingles, millboard, textured paints, wall and ceiling coating materials, floor tiles, and as a fire-retardant.

Today, asbestos is found most commonly in older homes. Many manufacturers have limited the use of asbestos voluntarily, although there has been no legal ban in the United States.

Even if asbestos is present in your facility, it may not be a serious problem. The mere presence of asbestos in a home or a building is not hazardous. The danger is that asbestos materials may become damaged over time and release microscopic fibers into the air. Inhaling these fibers is extremely dangerous. **THE BEST APPROACH FOR ASBESTOS MATERIAL IN GOOD CONDITION IS TO LEAVE IT ALONE!** Disturbing undamaged asbestos may create a health hazard where none existed before. Cutting, sanding, or other remodeling activities can disturb asbestos, causing it to become airborne, which is most dangerous to health.

Asbestos can be either friable or nonfriable. The state and federal government regulate friable asbestos because it is extremely dangerous.

Friable asbestos can break easily and be crumbled in one's hand. It *may* be found in pipe insulation, fireproofing materials, plaster, and ceiling tile.

Non-friable asbestos, when dry, cannot be crumbled, pulverized, or reduced to powder either by hand pressure or reasonable mechanical forces. Examples of non-friable asbestos materials are roofing, floor tile, and siding.

Health Effects

The most dangerous asbestos fibers are too small to be visible, but after they are inhaled, they can remain and accumulate in the lungs, potentially causing lung cancer, mesothelioma (a cancer of the chest and abdominal linings), and asbestosis (irreversible lung scarring that can be fatal). Symptoms of these diseases do not show up until many years after exposure began. Most people with asbestos-related diseases were exposed to elevated concentrations on the job; some developed problems from exposure to clothing and equipment brought home from job sites. Studies have shown that smokers are at higher risk of developing asbestos-induced lung cancer.

You MUST:

- **Communicate asbestos hazards to employees.** (OSHA) Building and facility owners must maintain records of the presence, location, and quantity of presumed asbestos-containing materials. OSHA requires that employers communicate the hazards of presumed asbestos-containing materials located in all buildings to employees who may be exposed to these materials. For example, an employer must post a sign outside a mechanical room where a pipe containing asbestos is located. The sign must:

  1. Identify the presumed asbestos containing material.
  2. Identify the location of the presumed asbestos containing material.
  3. Identify the appropriate work practices, which, if followed, will ensure the presumed asbestos containing material will not be disturbed.
  4. The pipe must also be labeled. The label must say:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

(The following asbestos rules apply to home businesses, including child care facilities)

- **Maintain friable asbestos in safe condition.** (FSSA) If the asbestos material is in good shape and will not be disturbed, do nothing! But, if it is friable or you are suspicious of it becoming friable, a licensed asbestos contractor must either repair or remove the asbestos material. Repairing usually involves proper sealing (encapsulation) or covering, then tagging the material so that you and future building contractors and owners know where the asbestos is located.

- **Have your facility inspected before renovation.** (IDEM) Indiana law requires that prior to renovation or demolition activities for any commercial, industrial, or institutional facility (including residential structures and apartment buildings where there are five or more dwelling units), you must have the facility or the affected part of the facility inspected by a licensed asbestos inspector to determine the presence of asbestos. This regulation applies regardless of the year your facility was built. It is required by the Indiana Emission Standards for Asbestos Demolition and Renovation Operations. Contact IDEM's Office of Air Management, (800) 451-6027, ext. 33861, or (317) 233-3861, for a current list of licensed asbestos contractors.

- **Use licensed contractors.** (IDEM) Indiana regulations require that licensed asbestos contractors be used for any disturbance or removal of *friable* material at least three linear feet (which is the measurement on or off pipes), three square feet on or off facility components (any part of a facility, including equipment), or a total of .75 cubic foot on or off all facility components. If you are not clear whether your components meet this standard, contact IDEM's Office of Air Management, (800) 451-6027, ext. 33861, or (317) 233-3861, for assistance. When a renovation is going to affect non-friable material, always make sure the contractor's work practices will not cause it to become friable. Ensure licensed contractors also follow applicable OSHA standards to protect employees (See Chapter 7: Resources to obtain asbestos regulations.)

- **Ensure your contractor disposes of your asbestos properly.** (IDEM) Your facility always is responsible for the proper disposal of waste, regardless of the contractor used. It is imperative that your contractor disposes of asbestos waste--a highly regulated material because of its hazard risk--correctly. Ensure that the contractor wets, wraps or bags, and labels asbestos waste, and that it is taken to a landfill approved to accept "asbestos" waste. If the contractor disposes of it improperly, you may be held liable.

You SHOULD:

- **Have a licensed inspector perform an asbestos inspection.** Asbestos is so dangerous that only professional, licensed asbestos contractors who have been trained specially to handle it should do the work. DO NOT TAKE SAMPLES YOURSELF since there may be an increased health risk if fibers are released.

- **Do not touch asbestos that you are leaving alone.** However, visually inspect the material for damage or deterioration. NEVER touch, examine, or sample asbestos-containing materials in the presence of children.

- **Contact IDEM or your local health department immediately in the event of an asbestos release.** Close off the portion of the facility in which the release has occurred so that people will not be exposed. Close off air ducts and vents, seal windows, and tape bottoms of doors to prevent drafts, until the problem is fixed. Do not turn off fire alarms or sprinkler systems in the affected portion.

You should CONSIDER:

- **Developing an asbestos management plan for your facility.** Indiana schools are required to have these plans. For more information, contact Frank Profit at IDEM's Office of Air Management, (800) 451-6027, ext. 33861, or (317) 233-3861. In addition, you should check with your local county health department for possible requirements for child care facilities. See Chapter 7: Resources.

Additional information on asbestos is available on EPA's Asbestos Homepage at:
www.epa.gov/opptintr/asbestos/pubs.htm#ombudsman.

2.3 RADON

Radon is a naturally occurring radioactive gas that results from the decay of uranium in clay soil. When radon breaks down, its decay products can be inhaled, presenting a health hazard. The potential danger of radon in your facility may remain hidden because radon is odorless, colorless, and tasteless.

Radon typically moves up through the ground to the air above and concentrates in a home or building through cracks and other holes in the foundation. Any building can contain radon, whether the building is old or new, well-sealed or drafty, with or without basements. Radon gets into the building through:

< cracks in solid floors
< construction joints
< cracks in walls
< gaps in suspended floors
< gaps around service pipes
< cavities inside walls
< the water supply.

Radon is measured in picocuries per liter (pCi/L). About 0.4 pCi/L of radon occurs naturally outdoors. The average indoor radon level is estimated to be about 1.3 pCi/L. U.S. EPA is concerned especially about indoor radon levels at or above 4pCi/L. In Indiana, approximately 29% of homes have radon levels above 4 pCi/L, but with proper controls, also known as mitigation, some buildings can be reduced to 2 pCi/L or below. EPA recommends that home or building owners take action to reduce radon in a building if the annual concentration is 4pCi/L or greater.

Health Effects
Radon is the second leading cause of lung cancer, following smoking. Smoking and radon exposure together greatly increase lung cancer risk.

You MUST:

‘ **Use a state-certified radon tester or mitigator if you hire a professional to perform radon testing or mitigation (reduction).** (ISDH) Building owners may do their own radon testing; however, the Indiana State Department of Health highly recommends that you hire a certified mitigator to reduce radon in homes and buildings. Contact ISDH for the most current list of state-certified testers or mitigators.

You SHOULD:

Test your building. Testing is the only accurate way to determine radon levels. U.S. EPA, the Surgeon General, and the Indiana State Department of Health strongly recommend that all buildings be tested for radon. This can be done quickly and inexpensively. You should purchase radon test kits that have a U.S. EPA-certification designation. Note: U.S. EPA stopped certifying radon test kits in September 1998. However, the Indiana State Department of Health has a list of certified providers. Hardware stores and some county health departments sell radon test kits, as well.

U.S. EPA recommends performing a short-term test first. If your result is 4 pCi/l or higher, then repeat the short-term test or perform a long-term test to ensure the data.

Follow instructions carefully when self testing. It's better to test in the winter when the building is closed up.

‘ **Use experts to fix the problem.** U.S. EPA and the Indiana State Department of Health recommend that you use a qualified contractor or mitigator to fix your building because lowering high radon levels requires specific technical knowledge and special skills. Without the proper equipment or technical knowledge, you actually could increase your radon level or create other potential hazards. But, if you decide to do the work yourself, get information on appropriate training courses and copies of U.S. EPA's technical guidance documents from the Indiana State Department of Health. The state also can provide guidance on choosing a state-certified radon mitigator. These mitigators use a variety of methods to reduce radon, such as sealing cracks in floors and walls and installing pipes and fans. Retest after radon mitigation to ensure your levels have dropped.

‘ **Learn more about radon health risks, testing, and mitigation.** Call the Indiana State Department of Health for these U.S. EPA documents:
- < Consumer’s Guide to Radon Reduction
- < Citizen’s Guide to Radon (residential)
- < U.S. EPA’s Mitigation Standards (what contractors must do for radon reduction)
- < Radon Measurement in Schools
- < Reducing Radon in Schools
- < Radon: A Physician's Guide
- < Home Buyer's and Seller's Guide to Radon (real estate transactions)

These guides also can be found on the EPA web site at www.epa.gov/iaq/radon/pubs/index.html. For additional radon information, contact the Indiana State Department of Health, (800) 272-9723. ISDH also has these documents available:
- < Indiana State Department of Health NOTICE (radon summary)
- < A list of Indiana Certified Radon Laboratories (to purchase radon kits)
- < A list of Indiana Certified Radon Testers and Mitigators

2.4 CARBON MONOXIDE

You can't see or smell carbon monoxide, but at high levels it can kill humans and animals in minutes. The human body absorbs carbon monoxide 50 times faster than oxygen, causing suffocation.

Carbon monoxide is produced when fuel, such as gas, oil, kerosene, wood or charcoal, burns. If you maintain and use fuel-burning appliances properly, the amount of carbon monoxide produced usually is not hazardous. However, hundreds of people die accidentally every year from carbon monoxide poisoning caused by malfunctioning or improperly used fuel-burning appliances. Even more die from carbon monoxide produced by idling cars.

Health Effects
Fetuses, infants, elderly people, or people with anemia or histories of heart or respiratory disease are especially susceptible to carbon monoxide poisoning. Symptoms of high-level poisoning, which can be fatal, include severe headaches, dizziness, mental confusion, nausea, and faintness.

Low levels of carbon monoxide poisoning can cause symptoms similar to the flu or food poisoningCshortness of breath, mild nausea, and mild headaches. These short-term symptoms could have long-term health effects if exposure continues.

IF YOU SUSPECT CARBON MONOXIDE POISONING:

- ✓ **GET FRESH AIR IMMEDIATELY.** Open doors and windows, turn off combustion appliances, and **LEAVE THE FACILITY.**
- ✓ **CALL 911 OR GO TO AN EMERGENCY ROOM IMMEDIATELY.** Tell the dispatcher or physician you suspect carbon monoxide poisoning. A blood test performed soon after exposure can confirm poisoning.

You MUST:

‘ **Vent gas water heaters outside**. (OSFM)

- **Ensure your gas equipment and appliances are in good working order.** (FSSA, OSFM) For licensed centers and registered ministries, all gas equipment and appliances and those used by contractors must comply with the provisions of the Indiana Mechanical Code in effect at the time that they were installed. For more information, contact Mara Snyder at the Office of the State Fire Marshal, (317) 233-5341.

- **Not use portable, unvented or open grate gas heaters.** (FSSA, OSFM)

- **Comply with state fire code if you use portable, unvented, oil-burning heating appliances in homes** (they are **absolutely prohibited** in centers or ministries). (FSSA, OSFM) The codes state they must be vented and you must use proper fuel in kerosene space heaters.

- **Do not store gasoline-powered engines in enclosed spaces.** (FSSA, OSFM) These include mowers, weed trimmers, snow blowers, chain saws, small engines, or generators. For licensed child care centers and ministries, gasoline-powered engines shall not be stored anywhere indoors.

You SHOULD:

- **In homes, never allow children to sleep in rooms with an unvented gas or kerosene space heaters.** Such space heaters are absolutely prohibited in centers and ministriesCsee above.

- **Install and use an exhaust fan vented outdoors over gas stoves.** If cooking on the stove produces grease-laden vapors, a hood system is required. Follow manufacturer's instructions for installation.

- **Open flues when fireplaces are in use.**

- **Inspect all fuel-burning gas or electric appliances annually.** A trained professional should inspect oil and gas furnaces, gas water heaters, gas ranges and ovens, gas dryers, gas or kerosene space heaters, fireplaces, and wood stoves at the beginning of every heating season. Make certain the flues and chimneys are connected, in good condition, and not blocked.

- **Never idle cars in garages.** Even with the garage door open, fumes can build up rapidly in the garage and living areas of homes or buildings.

- **Never use gas ovens to heat the facility.**

- **Never use gasoline-powered engines in enclosed spaces.** These include mowers, weed trimmers, snow blowers, chain saws, small engines, or generators.

2.5 ASTHMA AND OTHER RESPIRATORY IRRITANTS

Childhood asthma is the leading chronic illness in U.S. children. Environmental pollutants commonly trigger asthma attacks in children who have a genetic or acquired predisposition to the disease. Children are particularly susceptible to air pollutants because they breathe a greater volume of air relative to their body weight.

Indoor Air Pollutants
Poor indoor air quality has been linked with asthma symptoms, as well as with other respiratory problems in children, such as increased frequency of respiratory infections, bronchitis, and pneumonia.

Indoor air pollutants often are referred to as biological contaminants. Biological contaminants can be molds, fungi, allergens, bacteria, mildew, viruses, animal dander, cat saliva, dust mites, cockroaches, and pollen. Tobacco smoke is another common and problematic lung irritant and health risk.

Biological contaminants, both indoor and outdoor, come from many sources. Pollens originate from plants; people and animals transmit viruses; people, animals, soil, and plant debris carry bacteria; and pets are sources of saliva, animal dander, and dung. In addition, the protein in urine from rats and mice is a potent allergen. When it dries, it can become airborne.

Contaminated central air handling systems are breeding grounds for mold, mildew, and other sources of biological contaminants, which a ventilation system may distribute throughout the building. Drapery, bedding, and other places where dust collects can harbor these contaminants.

Controlling the relative humidity level in a building can minimize the growth of some sources of biological contaminants. Standing water, water-damaged materials, or wet surfaces also serve as breeding ground for mold, mildew, bacteria, and insects. Dust mites are one of the most powerful biological allergens and can exist anywhere.

Health Effects
Asthma is a narrowing of the airways in the lungs that causes breathing difficulty. Some biological contaminants release disease-causing toxins and can trigger asthma attacks and other allergic reactions, including allergic rhinitis (an inflammatory response in the nasal passagesCsymptoms may include nasal congestion, sneezing, or a runny or itchy nose) and hypersensitivity pneumonitis (a lung disease caused by exposure to a variety of inhaled agents).

Symptoms of allergic reactions to mold and mildew may include sneezing, watery eyes, coughing, shortness of breath, dizziness, lethargy, fever, and digestive problems. Recently a particular mold called *Stachybotrys atra*, found in homes with water damage, has been linked to bleeding lungs in infants, which can be fatal. Symptoms include coughing up blood and nosebleeds. Research shows that simultaneous exposure to *Stachybotrys atra* and tobacco smoke increases the chance of lung bleeding greatly.

Smoking. Some studies suggest exposure to passive smoke is responsible for between 150,000 and 300,000 annual lower respiratory tract infections in infants and children younger than 18 months, resulting in between 7,500 and 15,000 hospitalizations in the United States each year. Second-hand tobacco smoke has been found to have multiple health effects on children, including increased risk for:

< lower respiratory tract infections, such as pneumonia and bronchitis
< reduced lung function and symptoms of respiratory irritation, such as coughing, excess phlegm, and wheezing
< middle ear fluid build-up
< asthmatic symptoms
< cancer (still under investigation).

Even if children are not exposed to second-hand smoke at your facility, they could be suffering the consequences of second-hand smoke at home. Educating parents about the harmful effects of second-hand tobacco smoke on their children is critical.

Histoplasmosis. Histoplasmosis is an infectious disease caused by inhaling spores of a fungus called *Histoplasma capsulatum.* The fungus is most often located in soils high in nitrogen content. Animal droppings increase this nitrogen content. The animals themselves can carry infected soil over long distances. Children and others with undeveloped or threatened immune systems are particularly susceptible to the effects of histoplasmosis.

Histoplasmosis primarily affects lungs, although symptoms vary greatly. The vast majority of infected people are asymptomatic (have no apparent ill effects), or they experience symptoms so mild they do not seek medical attention. If symptoms do occur, they usually begin within three to 17 days after exposure. The disease can appear as a mild, flu-like respiratory illness, with a combination of symptoms, including a general ill feeling, fever, chest pain, dry cough, headache, loss of appetite, shortness of breath, joint and muscle pains, chills, and hoarseness. Physicians arrest the disease with special antifungal medications. Mild cases usually are resolved without treatment.

To prevent histoplasmosis, staff and children should avoid situations where infected soil can become airborne, such as building demolitions where birds or bats have nested, landscaping or activities in soil with animal droppings, or simply playing in dirt with animal droppings. Only professionals with proper protective equipment should remove the infected soil to prevent accidental airborne exposures.

You MUST:

- **Prohibit smoking except in designated areas.** (FSSA, OSFM) In licensed child care centers, smoking is prohibited in the presence of children, in areas that will be occupied by children at any time, or in the kitchen. In ministries, smoking is only prohibited in the kitchen. The "Pro-Children Act of 1994" also prohibits smoking in Head Start facilities, and in kindergarten, elementary, and secondary schools that receive federal funding from the Department of Education, the Department of Agriculture, or Department of Health and Human Services (except funding from Medicare or Medicaid).

- **Use exhaust fans.** (FSSA, OSFM) Install and use exhaust fans that vent outdoors or through screened open windows in kitchens and bathrooms. Vent clothes dryers outdoors. The venting requirement is contained in the edition of the Mechanical Code in effect when the dryer was installed. Call the Department of Fire and Building Services, Technical Services Division, for more information, at (317) 232-1413.

You SHOULD:

- **Never smoke around children, especially where children play.**

- **Ensure that your air ventilation system is clean.** A well-designed ventilation system that is properly operated and maintained will, in most cases, take care of normal amounts of air pollutants automatically. Install new air filters quarterly. Make sure that drain pans are clean and slant toward the drain. Ensure that air handling units are clean.

- **Keep outdoor air intakes unobstructed.** Clear any obstruction, such as debris or clogged screens. Ensure that pollutant sources, such as dumpsters, loading docks, or areas where cars idle, are not located near the intakes. Check that outdoor air is moving into the intake grille by holding a small piece of tissue paper or light plastic at the intake grille. If it is working the tissue paper or plastic will move from the blowing air.

- **Prevent moisture build-up.** Ventilate the attic and crawl spaces to prevent moisture build-up. Humidity levels should be below 50% to control condensation, microbial growth, and dust mite activity. Thermometers purchased at hardware stores that measure temperature, humidity, and barometric pressure will help you monitor your humidity level. In times of high humidity, close windows and use an air conditioner and/or dehumidifier.

- **Clean humidifiers.** If using cool mist or ultrasonic humidifiers, clean the appliance according to manufacturer's instructions and refill with fresh water daily. Because these humidifiers can become

breeding grounds for biological contaminants, they have been linked to diseases such as hypersensitivity pneumonitis and humidifier fever. Evaporation trays in air conditioners, dehumidifiers, and refrigerators also should be cleaned frequently.

- **Clean or remove water damage.** Water-damaged carpets and building materials can harbor mold and bacteria. It is very difficult to completely rid such materials of biological contaminants. Thoroughly clean and dry water-damaged carpets and building materials (within 24 hours if possible) or consider removal and replacement. Always replace carpet padding if carpets have not dried within 24 hours.

- **Keep your facility clean.** Dust mites, pollens, animal dander, and other allergy-causing agents can be reduced, although not eliminated, through regular cleaning.

- **Do not vacuum or sweep when children are in the building.** Vacuuming actually can increase airborne levels of mite allergens and other biological contaminants. Central vacuum systems vented to the outdoors or vacuums with high-efficiency filters (HEPA filters) are helpful in deterring airborne dust.

- **Keep children away from soil with animal droppings.** To prevent exposure to histoplasmosis, keep children away from animal droppings in soil or construction/demolition areas.

- **Run water through unused floor drains and sinks.** Sewer gas is a build-up of a variety of chemicals, such as hydrogen sulfide, ammonia, and methane. Sewer gas may emit when drains are dry. Sewer gas can cause eye irritation, respiratory tract problems, dizziness, headaches, and nausea. Prevent sewer gas build-up and emissions by pouring a gallon of bleach water solution down drains not used routinely. FSSA's Child Care Health Section recommends using 100 parts per million bleach to water (approximately 1 teaspoon of bleach per gallon of water). If there is a severe odor, use a 10% bleach solution.

You should CONSIDER:

- **Limiting the number of indoor plants.** Although indoor plants are not a major source of mold spores, it is prudent to limit the number of houseplants because molds can grow in the dirt, and children may be allergic to the pollen in flowering plants.

- **Removing animals with fur.** Removing animals from a child care facility can be an emotionally charged issue, but many children are allergic to animal dander in the fur.

2.6 MERCURY

Mercury cycles through the environment from natural and man-made activities. It occurs naturally as a gas, liquid, or solid in rocks, soil, air, and living organisms. Humans have used it in dental fillings, thermometers, thermostats, blood pressure cuffs, lighting, electrical equipment, laboratory chemicals, and pharmaceuticals, among other commonly used materials.

Mercury emits into the air when fuel, such as coal, is burned or when waste containing mercury is incinerated. Eventually the airborne mercury ends up in some Indiana lakes and streams. Because the state has a large number of manufacturing industries and power plants that rely on coal-derived fuel to operate, mercury is one of the primary pollutants of concern in Indiana.

Inside the child care facility, IDEM is concerned about child and staff exposure to liquid mercury and ensuring that mercury-containing products are disposed of properly. IDEM and the U.S. Environmental Protection Agency are working together to prevent mercury pollution by educating industry and the public about mercury substitutions and how to keep mercury out of the waste stream through recycling.

Health Effects
Mercury is a nerve toxin that can impair the way we see, hear, walk, and talk. Fetuses and children are the most sensitive to mercury toxicity. When mercury enters waterways, bacteria and other processes can convert mercury into *methyl mercury,* which is the most toxic form of mercury. Methyl mercury bioaccumulates in fish tissue and may then be carried up the food chain to humans.

Direct human exposure to mercury can occur through eating contaminated fish. Exposure to high levels of fish contaminated with mercury has been associated with serious mental and physical retardation in infants. Lesser exposure can cause learning deficits and delayed walking and talking. In men, mercury can damage sperm.

Indiana, along with 38 other states, releases fish consumption advisories warning the public of the dangers of eating fish contaminated with mercury and polychlorinated biphenyls (see Section 2-7 for more information on PCBs.) The advisory is particularly important for children and for women who are nursing, pregnant, or planning to be pregnant because they can pass these contaminants on to the baby during pregnancy or breast-feeding. In children it can pass through the still undeveloped blood brain barrier to harm the brain. It takes up to one year for the body to eliminate mercury. Contact the Indiana State Department of Health, Indiana Department of Natural Resources, or IDEM for a free copy of the most recent Fish Consumption Advisory and additional pamphlets for women and children (See Chapter 7: Resources).

You MUST:

‘ **Use non-mercury, food-service approved thermometers in refrigerators and freezers.** (ISDH, FSSA) This regulation protects food from potential mercury contamination.

You SHOULD:

The following mercury items are priority materials only; however, many more items in your facility may contain mercury. See the mercury awareness brochure enclosed in this manual or the Self Assessment to find, recycle, or properly dispose of <u>all</u> items containing mercury in your facility. These materials should be recycled as soon as possible or at the end of their useful life. Make sure you tag items that contain mercury so that they do not end up in a landfill.

‘ **Identify and label mercury-containing items in your facility.** Go through IDEM’s mercury awareness brochure or Self Assessment to ensure children are protected from mercury-containing items and that they are recycled, rather than disposed of in a landfill.

‘ **Cleanup mercury spills properly!** See Indiana's Mercury Spill Guidance on the next pages.

‘ **Replace mercury thermostats with electronic thermostats.** Electronic thermostats usually are more energy efficient because they can be programmed to lower room temperatures at pre-set times. In Indiana, a number of heating, ventilation, and air conditioning contractors participate in a program with IDEM to collect any brand of used mercury-containing thermostats. A list of participating providers is in Chapter 7: Resources. Call IDEM for the most up-to-date list at (800) 988-7901.

‘ **Replace mercury thermometers with digital thermometers or alcohol (red or blue bulb) thermometers.** Digital or alcohol-filled thermometers are as accurate as mercury thermometers (silver-colored liquid) for most applications. If your mercury thermometer breaks, evacuate and ventilate the room. FOLLOW THE MERCURY CLEANUP PROCEDURES ON THE NEXT PAGES. You can purchase spill clean-up kits at most safety supply companiesBcheck your local yellow pages.

‘ **Dispose of or recycle mercury waste properly.** There are no mercury disposal regulations that apply to Indiana child care facilities, unless you dispose of more than 220 pounds a month of products containing mercury, such as fluorescent bulbs, which would place you under hazardous waste disposal guidelines. Most child care facilities will not meet this 220-pound range. Although legally you can dispose of mercury-containing products in your municipal landfill, Indiana has developed a number of recycling and alternative disposal options to keep mercury out of our landfills and waterways. For more information on mercury-disposal options, contact your local solid waste management district (see Chapter 7: Resources). Many local solid waste management districts sponsor mercury and other household hazardous waste collection and recycling programs to keep mercury from accumulating in the waste stream. These are free to residences. Commercial establishments, such as child care facilities,

even if you operate a center out of your home, probably will be charged a small fee for recycling these hazardous materials. For instance, flourescent light bulbs cost approximately $0.40 a bulb to drop off at a recycling center (see "Recycle your fluorescent bulbs" below).

- **Recycle your fluorescent bulbs.** Fluorescent and other mercury vapor light bulbs are excellent environmental choices because they use up to 50% less electricity than incandescent lights. However, these bulbs contain mercury, so they must be handled carefully and disposed of properly. If broken, mercury vapor will be released into the air immediately. When a fluorescent bulb burns out, wrap it carefully in layers of newspaper, or store it in a box or its original container. Mark the container "Mercury Lighting for Recycling." Do not break or crush the bulbs or the mercury vapor will be released. **If a fluorescent bulb breaks, follow the mercury spill guidelines on the following page!** Take unbroken bulbs to a recycling center that collects household hazardous waste or pay a contractor to pick them up. See Chapter 7: Resources for a list of fluorescent bulb recyclers or call IDEM's Office of Pollution Prevention and Technical Assistance for the most recent list at (800) 988-7901.

- **Prepare fish properly.** The Indiana Fish Consumption Advisory recommends what types of fish to avoid, what water bodies are at greatest risk, and the safest methods to prepare fish. See Chapter 7: Resources to obtain a copy of the advisory or brochure, "An Expectant Mother's Guide to Eating Fish."

You should CONSIDER:

- **Recycling batteries.** Many libraries and most local solid waste management districts accept batteries, even those that contain mercury. Contact your local solid waste management district to find out where the closest battery recycling drop-off facility is located.

- **Educating families about the Indiana Fish Consumption Advisory.** Encourage them to read and use the advisory and discuss the fish they eat with their healthcare provider.

IDEM Guidance for Mercury Spills:
Current Operating Procedures

September 20, 1998

1. Safe mercury cleanup is important:

Mercury can be found in a variety of household items. When liquid mercury is spilled, it forms droplets that can accumulate in the tiniest places; these droplets can emit vapors into the air that we cannot see or smell. Mercury vapor in the air can be extremely toxic. Families have been poisoned from mercury spills in the home that have not been cleaned up properly. Children are at highest risk. The small amount of mercury in fever thermometers, thermostats, and fluorescent bulbs is not likely to cause serious health problems, but it should be cleaned up properly to avoid exposure.

2. When a mercury spill occurs:

< NEVER use an ordinary vacuum or shop vacuum to cleanup mercury. The vacuum will put mercury vapor into the air and increase the likelihood of human exposure. The vacuum cleaner will be contaminated and have to be disposed of properly along with the spilled mercury.

< NEVER use a broom or a paint brush to cleanup mercury. It will break the mercury into smaller beads and spread them around.

< NEVER pour or allow mercury to go down a drain.

< NEVER allow people whose shoes or clothing may be contaminated with mercury to walk around.

3. Steps to take before cleaning up a spill:

< Contain the spill. Dike mercury (using rags or other disposable item) to prevent spreading. Divert from drains, cracks, and crevices.

< Keep children and others away from spill area to prevent the spread of contamination.

< Close doors to other indoor areas. Immediately ventilate spill areaCopen doors and windows and use fans that exhaust outdoors. Keep air flowing through room with mercury spill but make sure it is ventilating outside.

< Turn off heating, ventilating, or air conditioning systems that circulate air from the spill area to other parts of the house.

< If you or any other person has come in contact with the mercury, stay in the area to prevent spreading contamination. Put contaminated clothing/shoes into a trash bag, wipe off any visible mercury beads

into the bag, then shampoo and shower well after cleanup is complete.

4. Questions that will be asked when a mercury spill call comes into IDEM's Spill Hotline (888-233-SPIL):

$ Are there children in the facility?
< Remove them from the area.

$ How much spilled? Big or little spill? (Big is anything over 10 grams of mercury. A thermostat ampule contains about 5 grams.)
< If big, homeowner should call a contractor. If small (consumer product), follow cleanup directions below.

$ What type of surface(s) is the spilled mercury on?
> Hard or porous? Cracks or crevices?
If surface is hard, cleanup may be easier. A porous surface may be more difficult to clean, because the mercury can seep into porous surfaces, cracks, and crevices. In this case, the mercury cannot be completely removed and, if possible, should be sealed into the surface with epoxy paint or other sealing agent.
< Accessible or difficult to reach? Can make the cleanup job a bit more difficult.
< Disposable item? If item is removable, e.g. carpeting, rug, furniture cover, it should be removed and disposed of properly through the mercury recycling center closest to caller.

$ What have you done already to try to cleanup the mercury? Did you use a vacuum cleaner on the spilled area?
< How long used? The shorter, the better.
< What size room? The bigger the better, if vacuum cleaner was used.
< What to do with vacuum and bag? It cannot be cleaned, and it must be trashed. Unplug it and cut the cord at base so no one will use it. Triple bag with plastic and bring to local mercury collection site.

$ Is your water disposal on a city sewer line or on a septic system?
< If you are on a city sewer, your local wastewater treatment plant can handle small amounts of mercury if you accidentally get some down the drain, or if small amounts go down after rinsing mercury off your skin.
< If you are on a septic system, all mercury-contaminated materials (including any water used) need to be cleaned up and collected. If mercury accidentally goes down a septic system, stop using the system and contact a professional.

5. Suggested equipment and supplies for a small spill cleanup:

All supplies used will be contaminated and cannot be cleaned and reused. These items must be disposed of properly after use and taken to the mercury recycling center.

- rubber squeegee
- plastic dust pan
- plastic trash bags
- zipper-shut plastic bags
- flashlight
- wide-mouth plastic container with tight lid
- large tray or box
- facial tissues, toilet paper, or paper towels
- eye dropper
- index cards, playing cards, or other disposable heavy paper
- plastic wrap
- sulfur powder
- zinc or copper flakes

6. Cleanup Methods:

***ANYTHING* that comes in contact with mercury should be disposed of!**

- Push small mercury beads together with a card, stiff paper, or squeegee to form larger droplets. Push them into a plastic dust pan or use an eye dropper to pick up the mercury beads. Collect all mercury into a leak-tight plastic bag or wide-mouthed sealable plastic container.

- Work from the outside of the spill area toward the center. Work over a tray or box that is lined or covered with plastic wrap when pouring mercury. Mercury's high density and smoothness cause it to roll fast. Use a flashlight to look all around in the areas of the spill. The light will reflect off the shiny mercury beads and make it easier to see them.

- Sprinkle sulfur powder on the spill area after cleaning up beads of mercury; a color change from yellow to brown indicates that mercury is still present and more cleanup is needed.

- Sprinkle zinc flakes or copper flakes (available at hardware stores) to amalgamate any small amounts of mercury which remain.

7. Follow-up checklist:

- Wash your hands. Shower or bathe if other parts of your body may have contacted mercury.
- Continue to air out the room with outside air for two days if weather permits.
- If mercury is spilled in a regularly used area, you should consult your family doctor or local health department regarding mercury testing for your family.
- Take all elemental mercury, mercury devices, and mercury-contaminated items to the nearest mercury recycling center.

Remember: Get an experienced professional to cleanup large spills!

2.7 PCBs

Polychlorinated biphenyls, or PCBs, have been used most widely in electrical transformers as a fire retardant. A transformer converts electrical power from one voltage to another. The majority of the transformers containing PCBs were installed in apartments, residential and commercial buildings, industrial facilities, college campuses, and shopping centers constructed before 1978. A transformer usually is a large box on a telephone pole or on outside ground that is connected to the main power line. (Use the Self Assessment to determine if your facility has a PCB transformer.)

PCBs also have been found in fluorescent lighting ballasts manufactured before 1978. A ballast is a dry transformer that boosts up the electrical current to start a fluorescent bulb. If your lighting fixtures were installed before 1978 or are not labeled "NO PCB," they probably contain PCBs.

Health Effects
It takes up to six years or more for the body to rid itself of PCBs. Fetuses exposed to PCBs during pregnancy may have lower birth weight, smaller head size, and delayed physical development. They can develop learning deficits and memory problems that are hard to detect until later years. Exposure to PCBs also has been found to cause skin lesions, tumors, and cancer.

When PCB fluid burns partially, which can occur when electrical transformers are on fire, the PCB fluid produces *dioxin*, which is more toxic to humans than the PCBs themselves. Dioxin has been shown to cause cancer in laboratory animals.

You MUST:

- **If you have a PCB transformer, it must be registered with fire response personnel.** (U.S. EPA)

- **If you have a PCB transformer, visually inspect it quarterly for oil leaks on the ground.** (U.S. EPA) If it is leaking, notify IDEM, your utility or county health department immediately.

- **Ensure that proper PCB identification labels are affixed to the transformer and any access materials.** (U.S. EPA)

‘ **Maintain records of inspections, maintenance, and disposal of a PCB transformer.** (U.S. EPA) These records must be kept for three years after you have disposed of a PCB transformer.

You SHOULD:

‘ **Contact your local fire department if you notice any burning smell in your lighting ballasts.**

2.8 PESTICIDES

The overuse or inappropriate application of cleaning chemicals and pesticides can be a threat to children's health and the environment.

Pesticides are chemicals that are used to kill or control pests, including bacteria, fungi, weeds, insects, and rodents. Most pesticides are toxic, which means their purpose is to kill *something*. They may contain volatile organic compounds, which can be hazardous air pollutants that cause serious health and environmental effects.

Health Effects
Exposure to hazardous chemicals can endanger children's health because their smaller, rapidly developing bodies may be more sensitive to harmful chemicals. Scientific study on exposure to chemicals in pesticides is in the early stages, but great concern exists in the environmental and medical community that excessive exposure to pesticides at a young age can contribute to serious developmental problems.

Poisoning from these chemicals is too common. According to data collected from the American Association of Poison Control Centers, an estimated 74,000 children may have been involved in common household pesticide-related poisonings or exposures in the United States in 1994 alone.

Integrated Pest Management: A Comprehensive Approach
Recognizing the importance of protecting children from pesticide threats, a team of concerned individuals at Purdue University, Indiana University, and the Monroe County Community School Corporation has developed a program to reduce young Hoosiers' exposure to pesticides in schools and child care facilities. The foundation of the program is **integrated pest management (IPM).** IPM is a cluster of tools, based on prevention, to combat pests with more than sole reliance on pesticides, including:

- **Mechanical controls:** ensuring that pests are kept out with screens, weather-stripping, repairing cracks and holes, using sealable plastic containers to store food, fly strips
- **Cultural controls:** cleaning and sanitation
- **Education:** knowing the difference between "good" and "bad" bugs, pest identification and monitoring, and training staff
- **Hormonal controls:** the use of hormones rather than toxicants to kill bugs
- **Pesticides:** the judicious use of pesticides when necessary.

Integrated pest management doesn't have to be "one more thing" a child care administrator needs to add to an already full plate of facility management. The variety of non-chemical tools can be incorporated into ongoing custodial and maintenance activities, such as sanitation, energy conservation and building security, training of staff, and educational programs for children. It is a proactive, holistic approach in contrast to the reactive nature of chemical treatment strategies. In fact, over time pests may become resistant and build-up greater tolerance to chemicals used on them repeatedly.

You MUST:

- **Never spray pesticides when children or staff are present.** (FSSA) Never allow a pest control operator or certified staff to spray when children or staff are present. Follow the directions on the label to learn when it is safe for children and staff to return to the room or building after pesticide application.

- **Prevent entryways for pests.** (FSSA) The Child Care Health Section requires that you prevent the entry of insects and/or rodents with 16-gauge mesh screen on outside openings. FSSA also requires that you apply sealant around pipes, plumbing, ducts, and on cracks.

- **Clean.** (FSSA) The Child Care Health Section also requires that facilities are in neat, clean, orderly, and sanitary condition to minimize pest attraction to food sources or standing water. For example, there should not be food crumbs, food should be stored securely and off the floor, vents must be free of grease, and your cleaning schedule must be posted. Pest infestations are directly related to the availability of food and water.

- **Contract with a licensed pest control operator as necessary.** (FSSA) If insects and rodents become a problem, meaning they persist despite the techniques described above, the Child Care Health Section requires that you contact a pest control operator. The contractor must be licensed by the state. For verification of proper licensing, contact:
  Office of Indiana State Chemist
  Purdue University
  1154 Biochemistry
  West Lafayette, IN 47907
  (765) 494-1594; (765) 494-4331 (fax)
  Contact: David Scott, Pesticide Administrator

- **READ LABELS and use products correctly.** (IOSHA) State and federal laws require that you use the product labeled specifically for the pest and treatment site. For example, if you have an indoor ant problem, use a pesticide labeled for indoor ant control. Do not use a product labeled for outdoor use, lawns, or agricultural use. Store pesticides in their original containers and in a secure site accessible only to authorized staff. *(See the OSHA requirements for training staff on the proper use of chemicals in the next chapter, Safety and Sanitation, Section 3.4.)*

- **Store all pesticides and other chemicals properly.** (FSSA) Licensed child care centers must store all pesticides, cleaning supplies, and hazardous articles in locked areas that are inaccessible to children. Ministries and homes do not have to lock the chemicals but they must be in areas that are inaccessible to children.

You SHOULD:

- **Allow pesticides to be applied only by staff trained and certified by the state if you do not hire a licensed pest control operator.** Purdue University in West Lafayette offers training and testing. To sign up for Purdue's one-day training, contact the Purdue Pesticide Program office at (765) 494-4566. In lieu of classroom training, you can purchase training manuals from Purdue University's Media and Distribution Center by calling (765) 494-6794. There is no charge for the test; nominal fees are charged for training and materials.

- **Store food properly.** Store food in sealable containers, such as sealable plastic containers or zipper lock bags. All food products on open shelves should be stored 16"-18" from the wall or in cabinets. Allow the distance of a full broom sweep between the bottom shelf and floor of shelves. Do not store food products on the floor or in cardboard boxes, which are havens for rodents and cockroaches. Rotate your food stock and clean food storage areas vigilantly, especially beneath and behind shelves. Keep trash covered. Food stored in classrooms should be in sealable containers. To avoid roaches, do not store food in cardboard or paperboard boxes.

- **Eliminate water sources.** Keep mops off the floor, ensure floor drains are clear and sinks and counters are dry after use. Mosquitos can breed in water accumulating in puddles or buckets outdoors. If tires are used for swings or climbing devices, drill small holes in them to prevent water collection.

- **Request that your pest control operator use Integrated Pest Management strategies.** Purdue University has guidance for pest control companies. (See Chapter 7: Resources.)

- **Wash fresh fruits and vegetables with running water before eating.** Wash and scrub all fresh fruits

and vegetables thoroughly under running water, which has an abrasive effect that soaking alone does not. Washing will help remove bacteria and traces of pesticides; however, not all pesticides residues can be removed washing. You may need to peel fruits and vegetables when possible to reduce dirt, bacteria, and pesticides. Discard outer leaves of leafy vegetables.

- **Educate staff on pest issues.** Staff should familiarize themselves with the principles of integrated pest management: identifying and monitoring pests, sanitation, mechanical controls, and licensing requirements to apply pesticides.

You should CONSIDER:

- **Developing a written strategic pest control plan.** You can work with your licensed contractor on this plan, which will be your policy for handling pests with as few toxic chemicals as possible.

- **Educating families on the hazards of improper pesticide use.** Hold a workshop or send information home to parents about the potential for pesticide poisoning and how to incorporate IPM strategies into their house cleaning and maintenance. See Chapter 6: Environmental Stewardship for tips on communicating with parents.

CITATIONS

Chapter 2: ENVIRONMENTAL THREATS

2.1 LEAD

IDEM:
326 IAC 23-1 Removal
327 IAC 8-2-36-47 Drinking Water
40 CFR Part 141: National Primary Drinking Water Regulations

FSSA:
470 IAC 3-1.1-45(a) Health, Sanitation and Safety (homes)
470 IAC 3-4.2-10 Safety (centers)
470 IAC 3-4.1-11 Health program (centers)
470 IAC 3-2.5-4 Buildings, grounds, equipment, furnishings, materials and supplies (ministries)

OSHA:
29 CFR Part 1910.1025
29 CFR Part 1926.62

2.2 ASBESTOS

IDEM:
326 IAC 14-10 Work practice standards
326 IAC 18-1 Asbestos licensing

FSSA:
470 IAC 3-1.1-45(a) Health, Sanitation and Safety (homes)
470 IAC 3-4.1-11 Health program (centers)
470 IAC 3-2.5-4 Buildings, grounds, equipment, furnishings, materials and supplies (ministries)

OSHA:
29 CFR 1910.1001 (general industry)
29 CFR 1926.1101 (construction)

2.3 RADON

IAC 410-5.1-1

2.4 CARBON MONOXIDE

FSSA:
470 IAC 3-1.1-45(a) Health, Sanitation and Safety (homes)
470 IAC 3-1.1-46(h) Portable heaters (homes)
470 IAC 3-2.5-4 Buildings, grounds, equipment, furnishings, materials and supplies (ministries)
470 IAC 3-4.1-11 Health program (centers)
470 IAC 3-4.1-14 Building, grounds and equipment (centers-gas water heaters vented outside)

OSFM:
675 IAC 22 Portable heaters in homes (homes)
675 IAC 22.2.2 (Section 1103.3.2.6 of the Fire Code) gas-powered engine storage (centers and ministries)

OSHA:
29 CFR 1910.1000 Table 2-1 Limits for Air Contaminants

2.5 ASTHMA AND RESPIRATORY IRRITANTS

IC 16-41-37 Designate smoking area (centers, homes, ministries)
Public Law 103-227, Part C Environmental Tobacco Smoke, Pro Child Act of 1994 (centers)
470 IAC 3-4.1-13 Nutrition and food service (centers)

2.6 MERCURY

FSSA:
470 IAC 410-7-15
470 IAC 3-4.1-13
410 IAC 7-15.1

OSHA:
29 CFR 1910.1000 Table 2-2

2.7 PCBs

40 CFR, Part 761

2.8 PESTICIDES

U.S. EPA:
Title 7, United States Code, Chapter 125, Sec. 12(a)(G) Federal Insecticide Fungicide and Rodenticide Actaz

OFFICE OF INDIANA STATE CHEMIST:
IC 15-3-3.6, Section 14(2)

FSSA:
470 IAC 3-4.1-13 Nutrition and food service (centers)
470 IAC 3-4.1-14 Building, grounds and equipment (centers)
470 IAC 3-1.1-45(a) Health, sanitation and safety (homes)
470 IAC 3-1.1-47(a) Health, sanitation and safety (homes)
470 IAC 3-1.1-48(b) and (d) Health, sanitation and safety (homes)
470 IAC 3-4.5-4 Buildings, grounds, equipment, furnishings, materials and supplies (ministries)

Chapter 3: SAFETY AND SANITATION

3.1 EMERGENCYACTION PLANS

First Aid
470 IAC 3-4.1-15 Fire protection and safety (centers)
470 IAC 3-4.1-11 First aid; emergency telephone numbers (centers)
470 IAC 3-1.1-44(e) Emergency telephone numbers (homes)
470 IAC 3-1.10 First aid training (homes)
470 IAC 3-1.1-44(b) First aid kit (homes)

Emergency Evacuation
470 IAC 3-4.1-15 Fire protection and safety (centers)
470 IAC 3-1.1-32(a)(14) Written evacuation plan (homes)
470 IAC 3-1.1-33.5(2) Emergency training (homes)
470 IAC 3-4.1-11 Health program-poisons (centers)
675 IAC 22-2.2 Section 1303.3.2 of the Fire Code (ministries)
675 IAC 22-2.2 Section 1303.3.3.2 (centers)

3.2 FIRE SAFETY
470 IAC 3-4.1-15 Fire protection and safety (centers)
675 IAC 22-2.2 Fire prevention code (centers)
675 IAC 13-2.3-26; 675 IAC 22-2.2-489 Fire prevention code (ministries)
675 IAC 13-2 New construction, alteration, addition (centers)
675 IAC 13-2.3 Occupancy (centers)
470 IAC 3-1.1-7 Residential structure (homes)
470 IAC 3-1.1-16 (a) Residential structure definition (homes)
470 IA 3-1.1-46(u) and 470 IAC 3-1.1-32(a)(13) Notify fire department (homes)
410 IAC 6-12-7 New building or alterations (centers)
410 IAC 3-4.1-6 Reporting fires (centers)
470 IAC 3-1.1-46(v) Reporting fire damage (homes)
675 IAC 22-2.2 (Section 1302.2 of the Fire Code) Reporting fires (centers, homes and ministries)
470 IAC 3-1.1-47 (d) Housekeeping (homes)
470 IAC 3-1.1-46 (s) Fire drills (homes)
675 IAC 22-2.2 (Section 1303.3.3.2 of the Fire Code) Fire drills (centers)
675 IAC 22-2.2-489 Fire drills (ministries)
IC 16-41-37 Designate smoking area (centers, homes, ministries)
Public Law 103-227, Part C Environmental Tobacco Smoke, Pro Child Act of 1994 (centers)

470 IAC 3-1.1-46(l) Smoke detectors (homes)
470 IAC 3-1.1-46(m) Fire extinguishers (homes)
29 CFR 1910.157 Fire extinguisher training (IOSHA)
470 IAC 3-1.1-46(c) Exits (homes)

3.3 UNIVERSAL PRECAUTIONS/INFECTION CONTROL

410 IAC 1-4 Indiana Universal Precautions Rule
410 IAC 1-3 Indiana Infectious Waste Rule
29 CFR 1910.1030 Occupational Safety and Health Administration Bloodborne Pathogen Standard
470 IAC 3-1/1-44(d) Isolating ill children (homes)
470 IAC 3-4.6-1 Isolating ill children (ministries)
470 IAC 3-4.11 Health program (centers)
470 IAC 3-1.2-6(a) and (c) Diapering (homes)

3.4 HAZARDOUS CHEMICALS

410 IAC 7-15.1 Indiana State Board of Health, Food Service Sanitation Requirements (centers, ministries)
410 IAC 1-4 Indiana Universal Precautions Rule
29 CFR 1910.1200 Hazard Communication (centers, ministries and homes)

3.5 GENERAL SAFETY

470 IAC 3-4.1-11 Health program-hazardous item storage; toys and equipment, including guns and firearms (centers)
470 IAC 3-4.1-14 and 470 IAC 3-4.2-9 Safely store items (centers)
470 IAC 3-4.2-10 Furniture safety (centers)
470 IAC 3-4.5-4 Buildings, grounds, equipment, furnishings, materials and supplies-hazardous item storage; toys and equipment; stacking items (ministries)
470 IAC 3-1.1-48(b) and (d) Health, sanitation and safety-hazardous item storage; toys and equipment; stacking items (homes)
470 IAC 3-4.1-14 Building, grounds and equipment-hot water control; carpeting; swimming/wading pools (centers)
470 IAC 3-1.1-39(c) and (d) Health, sanitation and safety-portable wading pools and inground and nonportable above ground swimming pools (centers)
470 IAC 3-4.1-15 Fire protection and safety-electrical outlet covering (centers)
470 IAC 3-1.1-48(a) Health, sanitation and safety-electrical outlet covering (homes)
470 IAC 3-4.5-4 Electric plate covers (ministries)
470 IAC 3-1.1-44(b) ammunition and firearms (homes)

Chapter 3 Safety & Sanitation

Environmental threats are not the only hazards that can impact the health and safety of children in child care facilities. The Indiana Department of Environmental Management collaborated with several state and federal agencies to collate and distill the safety and sanitation concerns, including emergencies, fires, communicable diseases, and chemical hazards, at child care facilities. Like Chapter 2: Environmental Threats, this chapter explains what you **MUST** do, what you **SHOULD** do, and what you should **CONSIDER** doing to create the healthiest and safest environment for children and staff.

3.1 EMERGENCY ACTION PLANS

The purpose of an Emergency Action Plan is to prepare and protect children and staff from serious injury or loss of life in the event of a major disaster. Major disasters include fire, tornado, earthquake, bomb threat, violence in the workplace, or hazardous chemical spill.

You MUST:

- **Maintain a first aid kit.** (FSSA, OSHA) For centers, the kit must contain supplies specified by your physician. Recommended contents may include:
  - Band-Aids
  - sterile gauze pads - both regular and nonstick type
  - adhesive tape, 2-inch width
  - steristrips (for closing minor lacerations)
  - soap - small sample bar (Note: hydrogen peroxide solution is unnecessary. It is no better than soap and water for cleaning wounds.)
  - alcohol wipes or pledgets
  - elastic bandage (for sprained ankle)
  - triangular bandage (for sprained ankle or arm injury, or as a tourniquet)
  - needle and tweezers (for removing slivers or ticks)
  - razor blade (for poisonous snake bites)
  - small scissors
  - papain (meat tenderizer powder for bee stings)
  - insect repellent
  - sunscreen
  - Syrup of Ipecac--make sure date has not expired (This is required for homes. For centers, it must be approved by your physician.)

- **Have an approved first aid manual available, such as Red Cross or equivalent.** (FSSA, OSHA) You must also have on staff at all times, someone with a valid first aid/CPR certification if the childcare facility is more than three minutes from the nearest medical emergency dispatch location.

- **Post emergency numbers by the telephone.** (FSSA, OSHA) These must include:
  - Nearest emergency facility (hospital)
  - Ambulance
  - Fire
  - Poison control
  - Consulting physician
  - Dentist

‘ **Provide first aid training.** (FSSA) Ensure that employees who provide direct care to children are trained in basic first aid techniques, including pediatric cardiopulmonary resuscitation.

‘ **Lock poisonous chemicals.** (FSSA) All poisons, chemicals, and items labeled "Fatal if Swallowed" must be in locked storage. For licensed homes, the law requires that hazardous chemicals are inaccessible (do not have to be locked) to children.

‘ **Develop a written Emergency Action Plan** (FSSA) (See sample in the Appendix.) Post these written procedures for disaster evacuation in case of fires and other emergencies in all child care areas.

‘ **Train staff on emergency and disaster evacuation procedures.** (FSSA, OSFM) This training must be included in new employee orientation. Written procedures for evacuation must be posted in all child care areas in centers. In centers, occupants must not pass through kitchens, storerooms, bathrooms, closets, or spaces used for similar purposes to reach an exit. Exit doors must:
  < swing in the direction of exit travel
  < discharge directly to the outside or an exit pathway
  < be equipped with panic hardware when required, and in accordance with the rules of the Fire Prevention and Building Safety Commission.

‘ **Practice emergency and disaster evacuation procedures.** (OSFM) Child care facilities must have monthly fire drills with all occupants evacuated. Depending on occupancy load, staff-only fire drills are required quarterly for some ministries.

You SHOULD:

‘ **Provide emergency training to employees annually.** Regulations require that centers and homes provide emergency action training only when employees are hired. But employees who have worked at a facility for several years may not remember the emergency training they received when they began--a refresher always helps.

WHAT TO DO IN AN EMERGENCY

The Occupational Health and Safety Administration recommends these procedures for the following emergencies:

‘ **Follow these procedures during a TORNADO WARNING:**

< Listen for the latest advisories.
< Observe the weather conditions outside.
< Assemble occupants in designated areas in the building.

‘ **Follow these procedures in the event of an EARTHQUAKE:**

< Do not go outside except when necessary. Seek safety under doorway passages, tables, or desks.
< The supervisor or other designated personnel should check for injuries and provide first aid if necessary.
< Maintenance personnel should check for fires and shut off gas, electricity, and water main controls.

‘ **Follow these procedures in the event of a BOMB THREAT:**

< The person who took the threat should notify the supervisor.
< Evacuate the building to the planned evacuation sites established in the Emergency Action Plan.
< Contact the police and fire department.
< Do not permit re-entry until emergency personnel have searched the building and declared it safe.

‘ **Follow these procedures in the event of a FIRE:**

< Activate the signal/alarm immediately.
< If you don’t have an automatic notification system with an automatic dialer, designate a staff member to notify local authorities and emergency personnel as part of your Emergency Action Plan.
< If time permits, shut off the power, proceed to evacuation sites indicated in the Emergency Action Plan, and conduct roll call.
< Provide first aid if there are any injuries.
< **DO NOT RE-ENTER THE BUILDING FOR ANY REASON** until the fire department has notified you that the building may be reoccupied.

3.2 FIRE PROTECTION AND SAFETY

You MUST:

- **Comply with Indiana fire and building laws.** (FSSA, OSFM) Contact the Office of the State Fire Marshal for information about these laws or for other fire safety information. Contact: Jeff Short (317) 232-2459 or Mara Snyder at (317) 233-5341.

- **Be inspected annually.** (FSSA, OSFM) The Office of the State Fire Marshal inspects each licensed child care center and registered ministry annually.

- **Comply with the requirements for an "E-3" occupancy if you are opening a child care center in an existing building.** (OSFM) An E-3 occupancy is the state building code designation for licensed child care centers and ministries. This is required if the building does not already house a child care facility. Before constructing or remodeling, the facility must retain an architect or engineer to walk through and confirm E-3 designation in writing. The facility must attach a letter from the engineer or architect that confirms this designation when applying for its child care license or registration. Alterations specific to that building may be required to achieve E-3 occupancy designation. *For child care ministries,* any building *newly constructed* as a child care ministry must also meet E-3 requirements. State and/or local building officials will make the final determination of whether the building complies with the requirements of an E-3 occupancy.

- **Meet the definition of a residential structure.** (FSSA) Licensed child care homes must be in residences in which at least six children at any time receive child care from a provider. Licensed child care homes must notify their local fire department of the licensed capacity and hours of operation.

- **File new or alteration building plans.** (OSFM) If you are constructing a new building or altering an existing building in a way that requires plans to be filed, you must file plans with:
  - Plan Review Division, Department of Fire and Building Services, 402 W. Washington St., #W245, Indianapolis, IN 46206, (317) 232-1431.
  - Sanitary Engineering Section, Indiana State Department of Health, 2 North Meridian St., Indianapolis, IN 46204, (317) 633-0177 (Licensed centers only).

  File plans *BEFORE* beginning construction.

‘ **Report fires.** (FSSA, OSFM) You must immediately report EVERY FIRE to the fire department.

‘ **Report fire damage.** You must report promptly any damage caused by fire or natural disaster to the Child Care Health Section at FSSA.

‘ **Practice good housekeeping at all times.** (FSSA, OSFM) For fire safety, this means:
- < Discard trash containing combustible materials promptly.
- < Clean up spills immediately.
- < Do not let trash accumulate.
- < Do not accumulate paper, rags, and packing materials.
- < Keep storage areas clean.
- < Keep stove hoods and equipment free of dust and grease. The Office of the State Fire Marshal annually inspects stove hood systems at any center or ministry where they are required.

‘ **Store flammable liquids in tightly sealed containers and in rooms inaccessible to children.** (FSSA, OSFM) Centers must lock up hazardous chemicals in approved cabinets.

‘ **Not use portable electric or gas heaters.** (FSSA)

‘ **Keep all stairways, halls, corridors, exits, and aisles free from obstruction and lighted at all times.** (FSSA) Keep evacuation routes clear for access. Emergency lights must be provided in all interior stairways and corridors. Do not store items under stairways. Class II homes must have lighted exit signs but not halls. Class I are not required to have lighted exits signs nor halls.

- **Conduct and document fire drills.** (FSSA, OSFM) Fire drills must be conducted monthly for licensed centers and registered ministries, and quarterly in licensed homes. All fire drills must be documented for the inspector to review.

- **Designate a smoking area.** (FSSA, OSFM) If you allow smoking in your center, you must designate a smoking area that is the only place in the center where smoking is permitted. If no smoking area is designated, smoking is prohibited inside the building and "No Smoking" signs must be posted. In licensed child care centers, smoking is prohibited in the presence of children, in areas that will be occupied by children at any time, or in the kitchen. In ministries, smoking is prohibited only in the kitchen. The "Pro-Children Act of 1994" also prohibits smoking in Head Start facilities, and in kindergarten, elementary, and secondary schools that receive federal funding from the Department of Education, the Department of Agriculture, and the Department of Health and Human Services (except funding from Medicare or Medicaid).

- **Install an approved fire alarm system.** (OSFM) In some buildings, an automatic sprinkler system also may be required if the building has not been used for a child care center before, has been altered, or the child care facility has been moved to other than the ground-level floor. *For ministries, this requirement only applies if you have more than a 50-person occupant load.*

- **Provide smoke detectors.** Electric or battery-operated smoke detectors must be installed to manufacturer's specifications and located and adjusted to operate reliably in case of smoke in any part of the home. Not less than one smoke detector needs to be at the top of each stairway and adjacent to all sleeping areas.

- **Provide required exits.** (FSSA, OSFM) Licensed child care centers must have a minimum of two exits out of each classroom larger than 240 square feet. These exits must be separated by a distance specified by the Fire Marshal. In addition, each center must have the number of required exits, based on the total area of the building. No center can have fewer than two exits at different sides of the building, leading to the public way at ground level (unless the facility has a variance). Exits must not pass through kitchens, storerooms, bathrooms, closets, or spaces used for similar purposes in centers. For licensed child care homes, there must be at least two means of escape in the house.

- **Install fire extinguishers.** (FSSA, OSFM) The Office of the State Fire Marshal will determine the proper type, location, and number of fire extinguishers a center must have. The extinguishers must be visible, accessible, and properly mounted more than five feet from floor level. In licensed homes, a 22 pound or greater ABC multiple purpose fire extinguisher must be located on each floor you provide child care services. An additional extinguisher must be located in the kitchen area.

- **Provide fire extinguisher training as part of your mandatory safety training.** (IOSHA) If staff members are required or allowed to use fire extinguishers they must be trained to use them properly. This applies to any facility that has one or more employees.

You should CONSIDER:

- **Requesting an in-service training.** Contact your local fire department to conduct an in-service training for staff and a presentation for children.

For more information on fire regulations and safety, contact the Inspection Division, Office of the State Fire Marshal, 402 W. Washington St., #E241, Indianapolis, IN 46206, (317) 232-2222.

3.3 BLOODBORNE PATHOGENS AND INFECTIOUS DISEASES

Acquired Immunodeficiency Syndrome (AIDS) and Hepatitis B can be fatal diseases. Their modes of transmission merit serious attention and caution. They are contracted by direct exposure to infected blood or certain body fluids, such as semen or vaginal secretions, or any body fluid mixed with blood that has been infected by the bloodborne pathogens known as the human immunodeficiency virus (HIV), the Hepatitis B virus (HBV), or the Hepatitis C virus (HCV).

To be exposed in the child care setting, the infected blood could get into the body through open sores, dermatitis, by a puncture wound (needle stick), or through mucous membranes in the ears, nose, and mouth. Not all contact with blood results in an exposure to HIV, HBV, HCV.

The Occupational Safety and Health Administration (OSHA) developed the Bloodborne Pathogen Standard in 1991. This standard is designed to protect workers in health care and related occupations, such as child care, from the risk of exposure to bloodborne pathogens.

The OSHA standard applies to all employees who have a reasonable, anticipated risk of exposure to blood or other potentially infectious materials in the workplace. The rule does not apply to handling of urine, feces, vomit, or saliva, unless these body fluids are mixed with visible blood.

You MUST:

The following requirements are from federal OSHA statutes adopted by the Indiana State Department of Health and the Indiana Occupational Safety and Health Administration.

‘ **Train staff to follow Universal Precautions.** (ISDH, IOSHA) Universal Precautions are barrier precautions to prevent contact with blood or certain other body fluids. In the child care setting, blood and body fluids mixed with blood would be the only body fluids that a worker may contact that would put them at risk for HIV, HBV, and HCV.

  Universal Precautions training must include, at a minimum, a video or other presentation on the basic knowledge of bloodborne diseases and a presentation on specific Universal Precautions related to the employee's responsibilities. A training video is available through the Child Care Information Line at the Bureau of Child Development at (317) 233-5414.

  < Training must take place before the employee begins any assignment.
  < A staff member who has received training in Universal Precautions and bloodborne diseases may train other staff members.
  < Attendance records must be maintained of employee's participation in Universal Precautions training.
  < Training must be repeated annually for each employee.

At a minimum, training content must cover:

- < A copy and explanation of the OSHA standard.
- < Epidemiology (how the disease spreads) and symptoms of the bloodborne pathogen.
- < Modes of transmission.
- < Information about the facility's bloodborne pathogen plan, and where the plan can be reviewed.
- < Methods to recognize tasks at high risk for exposure and other activities that may involve exposure to blood.
- < Use and limitations of engineering controls, work practices, and personal protective equipment (PPE).
- < PPE types, use, location, removal, handling, decontamination, and disposal.
- < PPE selection and basis.
- < Hepatitis B vaccine information.
- < Use of "spill kits" and location of kits with quick access.
- < Procedures for limiting exposure to blood or other potentially infectious materials.
- < Post-exposure evaluation and follow-up.
- < Signs and labels.
- < Question and answer session.

These organizations or individuals, in addition to others, may provide Universal Precautions training:

- < County health departments
- < America Red Cross Indiana, HIV/AIDS Network
- < American Red Cross local chapters, HIV/AIDS Programs
- < School corporation nurse
- < Hospital infection control nurse
- < Local community action groups
- < Indiana Occupational Safety and Health Administration

- ‘ **Document Universal Precautions training**. (ISDH, IOSHA) Facility directors must maintain records of staff training for at least three years from the date of training.

- ‘ **Develop an exposure control plan.** (ISDH, IOSHA) The exposure control plan must include how to reduce workplace exposure and the procedures if an exposure occurs. If an exposure occurs, document routes of exposure and identify the source individual. (See the Appendix for a sample exposure control plan in the child care setting.)

‘ **Offer the Hepatitis B vaccination to employees free of charge.** (IOSHA) Child care facilities must offer and pay for Hepatitis B vaccination for employees who are designated to render first aid assistance, even though this assistance is not their primary work assignment. Employees may decline to receive the vaccine, but the employee must sign a written document (see the sample Bloodborne Exposure Control Plan in the Appendix). If a child care facility does not offer in its exposure control plan the pre-exposure vaccination it must offer a post-exposure vaccination within 24 hours of contact with blood. You are required to maintain medical records for employees who have had exposure incidents for a period of not less than the duration of the facility's employment of the employee plus thirty years. For additional information on requirements for Hepatitis B vaccine and post-exposure procedures, contact the Indiana Occupational Safety and Health Administration at (317) 232-2688.

‘ **Provide personal protective equipment and supplies to prevent exposure to blood or certain other body fluids.** (ISDH, IOSHA) In child care facilities, personal protective equipment includes:
  < Disposable, single-use medical gloves to be used when handling blood or other potentially infectious materials. Replace gloves immediately if they become torn, punctured, contaminated, or if their ability to function as a barrier is compromised.
  < Mouthpieces for resuscitation (CPR)
  < Disinfecting agents, such as household bleach in a 10% solution or another disinfectant that says on the label that it is a tuberculocide. Follow the concentration and contact time specified on the label.
  < Spill kits, made up of:
    T disposable, single-use medical gloves
    T Disposable towels
    T Biohazard bag (for items that could release blood when compressed)

‘ **Dispose of infectious waste properly.** (ISDH) You must dispose of infectious waste, which is material that could release blood when compressed in a red biohazard bag. An example of infectious waste is when blood can be squeezed from towels. Most items, such as Band Aids or blood-*stained* towels, are not considered infectious waste in child care facilities. Contact a medical supply company to learn where you can obtain biohazard bags. Only place articles in a biohazard bag if blood can be released when compressed. You probably need to keep very few biohazard bags in your facility. Child care facilities are not regulated by the Indiana Infectious Waste Rule; therefore biohazard bags can be placed in the regular trash. However, landfills in some areas of the state may refuse to accept biohazard bags. Ask your trash collector for the location of a biohazard site. You may also ask an Emergency Medical Technician to take it. An alternative method to dispose of biohazard bags is to contract with a waste management company to pick up the bags and treat the waste prior to final disposal.

‘ **Follow the infection control procedures on the following page for controlling communicable diseases.** (FSSA) For a list of communicable diseases see the Appendix. Ask your health consultant for additional guidance.

‘ **Isolate children with communicable diseases.** (FSSA) Children who become ill or are suspected of having a communicable disease while at the facility must be placed in an isolation room or area under observation by a staff member before going home.

‘ **Sanitize *(ministries)* or disinfect *(centers)* facilities or articles that have been used by a child suspected of having a communicable disease** before another child or staff member uses them or until it has been established that the child does not have a communicable disease. (FSSA) At centers, toilet facilities, furnishings, toys, or other articles used by the infected child must be disinfected. (See Section 3.4 to learn proper sanitation or disinfection procedures.)

‘ **Notify parents when a child is suspected of having a communicable disease.** (FSSA)

‘ **Prohibit staff or other persons with communicable diseases from having contact with children.** (FSSA) Do not allow people with communicable diseases to work with children in a manner that the disease could be transmitted.

‘ **Follow infection control practices when handling all body fluids.** (IOSHA) Universal Precautions are for contact with ***potentially infected blood*** and certain other body fluids, including semen, vaginal secretions, and body fluids visibly mixed with blood. Follow these infection control practices for ***ALL BODY FLUIDS:***

1. **WASH YOUR HANDS** with soap and water **before** preparing or serving food and eating; **after** using the toilet, sneezing, or coughing; and **before and after** diapering and helping children use the toilet. **NOTE: ANTIBACTERIAL GELS ARE NOT A SUBSTITUTE FOR HAND WASHING WITH SOAP AND WATER.**
2. **TEACH AND HELP** children to wash their hands properly and often, especially after using the toilet and before eating.
3. **DON'T WORK** if you are ill. Follow guidelines for isolating ill children and sending them home.
4. **COVER YOUR NOSE AND MOUTH** when you sneeze or cough, and wash your hands with soap and water. Teach children to do the same.
5. **CHANGE YOUR CLOTHING** and children's clothing when wet or soiled with vomit, urine, feces (bowel movement), or blood.
6. **CLEAN AND SANITIZE TOYS,** cribs, cots, furniture, and floors regularly.
7. **DISCARD** urine, feces, blood, and vomit in a toilet. Never rinse or clean potty chairs in a hand-washing sink or kitchen sink.
8. **SANITIZE MOPS** after each use. If mops are in contact with blood, disinfect with 10% household bleach solution or other disinfectant that states it is a tuberculocide.
9. **DON'T REUSE DISPOSABLE ITEMS.** Discard all used disposable items into a tightly covered container that is lined with a leak-resistant, plastic bag. Examples include cups, plates, spoons, diapers, Band-Aids, medical gloves, paper towels, and tissues.
10. **PROVIDE EXTRA SUPERVISION** to children who push or bite to reduce bleeding injuries.
11. **WEAR SINGLE-USE DISPOSABLE MEDICAL GLOVES** when cleaning up blood or spills of other body fluids. Never use the same pair of gloves more than once. Wash your hands after removing gloves. Gloves are not a substitute for hand washing.
12. **PROMPTLY CLEAN, THEN DISINFECT** objects and surfaces soiled with blood or body fluids with a 10% household bleach solution or other tuberculocide. Never use this solution to cleanse skin.
13. **PUT CLOTH ITEMS SOILED** with blood or other body fluids in a leak-resistant plastic bag until they can be washed in a washing machine in water above 160^0F for at least 25 minutes OR if your machine cannot meet that temperature requirement, then use household bleach (one cup bleach per top loading washer, 2 cup for bottom loading).
14. **DISPOSE OF INFECTIOUS WASTE PROPERLY.** You must dispose of infectious waste, which is material that could release blood when compressed, such as when blood can be squeezed from towels, in a red biohazard bag, Most items, such as Band Aids or blood-stained towels, are not considered infectious waste in child care facilities. Contact your local health department (see Chapter 7: Resources) to learn where you can obtain biohazard bags. You probably need to keep very few in your facility. Make sure they are not used for your regular trash.

‘ **Follow these procedures for diapering:**

1. Wash hands with soap and warm water and dry with disposable paper towel *(Ministries and homes not required).*
2. Gather equipment and put on diapering area.
3. Spread wax paper on changing table. Cover entire length and width of pad. *(Wax paper is not required for ministries. Ministries must sanitize the pads after each use. Homes must have waterproof material between child and surface of changing table.)*
4. Pick up baby and place on diapering area.
5. If blood is present, single-use disposable medical gloves must be worn.
6. Release diaper.
7. Using ankle hold to ensure safety, remove soiled diaper.
8. Place soiled diaper on wax paper or into plastic bag.
9. Gently wash baby's bottom. Avoid hard rubbing.
   - **$** To cleanse girls, spread labia apart gently, wash and dry between skin folds (cleaning downward only).
   - **$** To cleanse boys, merely wash and dry. In uncircumcised boys, never attempt to pull back the foreskin.
   - **$** Use soap and rinse well or use commercial wet wipes if child had bowel movement.
10. If applicable, remove disposable gloves and place in plastic bag.
11. Put diaper on child.
12. Take child to safe area.
13. Discard soiled diaper, washcloth, and towel into tightly covered sanitary container lined with plastic bag.
14. Wash hands with soap and warm water and dry with disposable paper towel.
15. Sanitize diaper changing pad and table with a sanitizing bleach solution of one tablespoon per quart of water. Use a 10% bleach solution or other tuberculocide if visible blood is present.
16. Wash hands again as in item number 14.
17. Record on child's record and note any unusual observations, such as rash, loose bowel movement, bleeding, etc. *(not required for homes).*

You SHOULD:

‘ **Educate staff on Hepatitis A hazards and precautions.** Hepatitis A virus is found in the stool of persons with the virus. It usually is spread by putting something in the mouth that has been contaminated with the infected stool. The virus is more easily spread under poor sanitary conditions, such as contaminated water or ice; raw shellfish harvested from sewage-contaminated water; and fruits, vegetables, and other foods eaten uncooked that were contaminated during handling. Although infected children younger than 5 usually do not have symptoms of Hepatitis A, they easily spread the infection to older children and adults. Symptoms usually develop suddenly and may include fever, tiredness, loss of appetite, nausea, abdominal pain, dark urine, yellowing of skin and eyeballs, and light-colored stool. The best precaution is to practice the infection control practices described above when handling all body fluids.

For questions on bloodborne pathogens and other communicable diseases, call the Indiana State Department of Health, Communicable Disease Division, at (317) 233-7125.

3.4 HAZARDOUS CHEMICALS

All child care providers must keep their facilities clean and safe. This section covers what to clean them with, how to clean them, and the safe management of all chemicals.

Cleaning. Sanitarians and inspectors in the Child Care Health Section of Indiana's Family and Social Services Administration report the number one mistake they see in child care facilities is the improper use or mixture of chemicals. More is not better when mixing concentrations of cleaning chemicals! If the solution is too strong it will leave a residue (usually invisible) and expose children to unsafe levels of these chemicals. The most important guidance in using any chemical is to **FOLLOW THE DIRECTIONS ON THE LABEL.** Chemical manufacturers must run their products through stringent tests to prove their safety. Use these products **only as recommended on the label.**

To clean properly, child care providers must distinguish between surfaces they sanitize and surfaces they disinfect.

SANITIZE means to clean with a *bacterialcide* (kills bacteria) or to heat for an adequate period of time to reduce bacteria to a sanitary level for utensils and equipment. To sanitize, surfaces must be treated with one of these options:

- **Chemical: a bleach solution or a quantanary ammonia solution at 100 parts per million** (follow the directions on the label to sanitize). Do not use a product for sanitation that says something similar to *"Rinse after using. Not to be used on food contact surfaces."* These products leave a residue that could be toxic, especially to children.
- **Heat:** sanitizing at the appropriate temperature for the appropriate time. Follow manufacturer's instructions on dishwashers for proper sanitation temperatures and times. In centers and ministries, the dishwasher must commercial grade (as opposed to home use) and be approved by ANSI, the National Sanitation Foundation (NSF) or Underwriters Laboratory (UL). You also can sanitize by immersing objects in 170^0 water for one minute.

DISINFECT means to clean with a *tuberculocide* (strong enough to kill tuberculosis). Disinfectants are designed to protect staff and children from the bloodborne pathogens discussed in the previous section. The *only* method to disinfect is:

Chemical: Bleach solution at 10%, or 1:9 parts, or quantanary ammonia at the *appropriate concentration* are the most effective and proven disinfectants. *If you use a quantanary ammonia product (commonly known as "quats") to disinfect, ensure that it is a tuberculocide or is mixed a tuberculocide strength.*

If you choose to use products other than bleach or quantanary ammonia to sanitize or disinfect, ensure that the label says "Approved for Food Contact Surfaces" by the U.S. Department of Agriculture (USDA), U.S. Environmental Protection Agency (U.S. EPA) or the Food and Drug Administration (FDA). It is best to submit the Material Safety Data Sheet to the Child Care Health Section at FSSA for a review before using these products. FSSA sanitarians advise you not to believe everything your cleaning product sales representative tells you.

STERILIZE applies only to infant bottles. To rid them of microorganisms, the bottles must be boiled a minimum of five (5) minutes. Nipples, collars, and caps must be boiled a minimum of three (3) minutes.

You MUST:

- **Sanitize all kitchenware, including dishes,** (ISDH) with a 50 parts per million bleach (approximately 2 teaspoon bleach to one gallon of water-test with chlorine test strips) or equivalent quantanary ammonia solution. This solution is for dishes or other items you submerge. They must be submerged for at least 60 seconds.

- **Sanitize the following** with a 100 parts per million bleach (approximately one teaspoon bleach to one gallon of water-test with chlorine test strips) or equivalent quantanary ammonia solution according to your cleaning schedule. All chemical sanitizers must be food-service approved.
  - < all food contact surfaces
  - < counter tops
  - < tables
  - < food preparation areas
  - < toys
  - < cots
  - < high chairs
  - < floors (you may use a stronger solution on floors only, such as a disinfectant, but it is necessary only if blood is present.)

 (Licensed child care homes are not required to disinfect, but they should.)

- **Disinfect the following** with a 1:9, or 10% bleach solution (approximately one cup bleach to nine cups water.)
  - < diaper changing tables
  - < floors (only if blood is present).
  - < other items that may have contact with body fluids, e.g., urine, blood, feces

  DO NOT USE DISINFECTANT SOLUTIONS ON SURFACES TO BE SANITIZED. THE CONCENTRATION IS TOO STRONG AND WILL LEAVE A RESIDUE THAT CAN BE INJURIOUS TO CHILDREN.

TIP: FSSA's Child Care Health Section staff recommends dispensing your sanitizing or disinfectant solutions in clean dishwashing bottles, rather than spray bottles. Bleach can be a respiratory irritant, especially for children. Spreading, rather than spraying, before wiping, prevents the bleach from becoming airborne and inhaled.

‘ **Communicate the hazards of chemicals to employees.** (IOSHA) The Occupational Safety and Health Administration established the Hazard Communication Standard, also known as the Worker's Right-to-Know Law. The law ensures that employers identify and communicate hazards in the workplace to all employees. The Hazard Communication Standard applies to any business that uses, distributes, or imports hazardous chemicals, regardless of the number of individuals employed. **THIS LAW APPLIES TO ANY FACILITY OR RESIDENCE IF THERE IS ONE OR MORE EMPLOYEE.** To comply with OSHA's Hazard Communication Standard (Worker's Right-to-Know Law), you must:

< **Develop a written Hazard Communication Program.** (IOSHA) See the Appendix for a sample Hazard Communication Program and tailor it to meet your facility's needs.

< **Provide employees information and training on hazardous chemicals found in the workplace.** (IOSHA) Ensure staff is aware of the chemical hazards and understands the Material Safety Data Sheets (MSDS) in case of an emergency (See sample MSDS in the Appendix.) All employees should know where these MSDS are located.

< **Maintain an updated inventory of MSDS for all chemicals in the workplace.** (IOSHA) (You do not need to obtain material safety data sheets for consumer goods used in the same amounts, manner, and frequency as an ordinary household consumer. The MSDS provides necessary information about how to handle chemicals safely, such as training, hazard evaluation, emergency procedures, and employee personal protective equipment. If you receive a chemical without a MSDS, write the supplier to request it. It is the supplier's responsibility to provide the MSDS. You must keep the MSDS for 30 years after you stop using the chemical. (See the Sample Hazard Communication Program in the Appendix for a sample letter to suppliers.)

‘ **Ensure that all containers are labeled properly.** (IOSHA) The label should include the identity of the chemical, hazard warnings, and name and address of manufacturer. If you receive a chemical that is not labeled properly, call the supplier and insist on proper labeling.

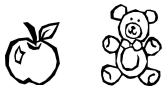
‘ **Know what to do in the event of a chemical-related accident.** (IOSHA) Examples may include toilet bowl cleaner splashed in eyes, pesticides causing respiratory problems, gasoline spills from lawnmowers, and other chemical spills. Call Poison Control, 911, follow instructions on Material Safety Data Sheets, or call IDEM’s Spill Hotline at 888-233-7745.

You SHOULD:

‘ **Label containers that are used as secondary containers.** IOSHA does not require you to label a secondary container if the person who made the transfer from the primary to secondary container is the only person to use it and that person uses it completely within one shift. However, labeling secondary containers with the chemical name, such as BLEACH--DISINFECTANT, is a recommended safety practice.

3.5 GENERAL SAFETY

You MUST:



- **Store hazardous items away from children.** (FSSA) Hazardous items include staff purses or backpacks, cleaning supplies, paper cutters, knife blades, tools, sharp scissors, unprotected radiators or air conditioners, hot water pipes, bleach bottles, harmful plants, matches, medications, and items marked *"Keep out of reach of children."* Medications, poisons, matches, lighters, and chemicals must be inaccessible to children. At centers, they must be locked with a key lock, combination lock, or child-proof lock.

- **Regulate hot water.** (FSSA) Hot water temperatures for hand washing must be between 100^0F and 120^0F, with an approved hot water control valve that will not allow the water to exceed 120^0F (except for dishwashers or laundry machines).

- **Maintain equipment, materials, and furnishings in good, safe condition.** (FSSA) Facility equipment and toys, including playground equipment, must be safe and in good condition. They must be sturdy and free from sharp points, jagged edges, splinters, protruding nails or wires, loose parts, poisonous materials, and lead-based paint.

- **Protect air conditioning compressors.** (FSSA) Air conditioner compressors must be enclosed if located on the playground or if children have access to them.

- **Firmly secure carpets.** (FSSA) In child care centers, to prevent slipping and falling, smaller carpets or area rugs must not be used. If carpeting is present, it must be firmly secured, with no raveled edges.

- **Safely store items.** (FSSA) Do not stack items so that they could fall or be a safety hazard.

‘ **Follow construction, design, and safety rules for swimming or wading pools.** (FSSA) Your licensing consultant can provide these rules. However, some counties prohibit these pools altogether in child-occupied facilities.
  < Check with your local health department for applicable ordinances before using portable pools.
  < Centers must have written parental permission prior to children swimming, have a person with a licensed Red Cross advanced life saving certificate on duty at all times, and double the staff-child ratio.
  < A minimum of two flotation devices must be provided for each swimming pool.
  < Centers, ministries, and homes must empty and sanitize portable wading pools immediately after use.
  < In-ground or nonportable above-ground pools must be secured with a locked gate and approved by the Indiana State Department of Health.

‘ **Protect electrical outlets.** (FSSA) Special electrical receptacle coverings must be installed in all rooms occupied by children. Ministries must have electric plate covers on all receptacles.

‘ **Lock ammunition and firearms in areas inaccessible to children at all times.** (FSSA)

Chapter 4 Throughout Your Facility

This chapter describes the most likely location of environmental, health, and safety threats in your facility. General **DO** and **DON'T** lists provide guidance for each room. Some of these do's and don't's are required by law for centers, ministries and homes; others are recommendations. Refer to chapters 2 and 3 for more detailed information about addressing specific threats.

4.1 IN EVERY ROOM

Particular environmental, health, and safety requirements and recommendations apply to your entire facility. These should be practiced in every room. Do's and don't's from this section will be repeated when the risk is high in a particular room of the facility.

LEAD

DO:

- Hire a licensed contractor to remove lead-based paint, if the intent is to remove the paint permanently.
- Cover lead-based paint with a low-odor, water-based paint or wallpaper if the intent is not to remove it permanently.
- Use a drop cloth if wet scraping paint.
- Ensure any surface with which children and employees come in contact is free of lead-based paint chips or dust.
- If lead-based paint is present, dust doorways and window sills with a wet rag and soap to remove lead-based paint dust. Lead-based paint dust can become airborne around friction areas, such as door jams or window sills, even if they are covered with water-based paint or other covers.
- Contact your landlord if you rent to have him or her address the lead-based paint in your facility.
- Clean up paint chips with wet paper towels. Discard chips in a double-layered, heavy-duty trash bag. Add water to the trash bag to dampen the paint chips.
- Wash children's hands frequently to prevent them from ingesting lead dust.
- Replace mini-blinds manufactured with lead. At a minimum, dust mini-blinds manufactured with lead with a wet cloth regularly.
- Get a lead risk assessment to determine your risk for lead contamination.
- Test at-risk children for lead in their bloodstream.
- Wet clean carpets annually. This is best to do in dry seasons to ensure the carpet dries within 24 hours to avoid mold.
- Ensure employees and construction workers are protected from airborne concentrations of lead during renovation or remodeling work.
- Educate employees about potential exposure to airborne lead.
- Sanitize toys and floors to prevent children from ingesting lead dust.
- Test your water for lead contamination, whether it comes from a utility or well.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

DON'T:

- SCRAPE, SAND, OR BURN lead-based paint. Leave lead-based paint undisturbed if it is in good condition before covering. Follow directions carefully for chemical removers.
- Perform lead-based paint activities, including covering, when children or pregnant women are present.
- Allow parents or staff that do work or hobbies involving lead to enter the facility while wearing their work clothes.
- Install new or repair existing water pipes with materials that contain lead.

ASBESTOS

DO:

- Contact IDEM or your local health department immediately in the event of an asbestos release.
- Obtain an IDEM certified licensed asbestos inspector to determine if asbestos is a hazard in your facility prior to any renovation or demolition activities. This is required regardless of the year your facility was constructed.
- Use a licensed contractor to remove or encapsulate any friable asbestos. (Friable asbestos is extremely dangerous when microscopic particles become airborne.)
- Develop an asbestos management plan for your facility if asbestos is present.
- Ensure your contractor disposes of asbestos properly.
- Communicate the hazards of asbestos to employees.
- Ensure asbestos-containing materials are labeled properly.

DON'T:

- Touch asbestos, under any circumstances. LEAVE UNDAMAGED ASBESTOS MATERIAL ALONE. Only licensed contractors should remove or encapsulate asbestos with protective material. Periodically inspect the material visually for any damage or deterioration.
- Allow nonfriable asbestos to become friable.
- Take asbestos samples yourself. Use a professional.

RADON

DO:

- Test your facility for radon. The best time to test is in the winter when air concentrates indoors.
- Use a state-certified radon tester if you use a professional to test or mitigate (fix) your facility.
- Use an EPA-recommended radon test kit if you test for radon yourself (Note: EPA stopped certifying radon test kits in 1998. For the most recent radon information, contact U.S. EPA at (800) 438-4318.)

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

DON'T:
- Try to fix radon problems yourself. Lowering high radon levels requires special technical knowledge and skills.

CARBON MONOXIDE

DON'T:
- Use portable, unvented or open grate gas heaters.
- Allow contractors to store or idle gas-powered equipment.

ASTHMA AND OTHER RESPIRATORY IRRITANTS

DO:
- Keep your facility clean. Thorough, regular cleaning can reduce a host of pollutants, as well as pests and rodents. All interior walls and ceilings should be washable and without textured paint.
- Ensure that your air ventilation system is clean.
- Prevent moisture build up. Clean or remove water damage, especially in carpets. If the carpet pad does not dry within 24 hours, replace carpet pad and possibly carpet.
- Clean portable humidifiers. If using cool mist or ultrasonic humidifier, clean them regularly according to manufacturer's instructions and refill with fresh water daily.
- Remove pets if they irritate children allergic to animal fur.

DON'T:
- Sweep, dust, vacuum, or mop while the building is occupied by children (unless you're cleaning up after meals/snacks or art projects)
- Smoke indoors, especially in the presence of children or where second-hand smoke can be circulated through the heating, ventilation and air conditioning system.

MERCURY

DO:
- Replace mercury-containing thermostats at the end of their useful life with electronic thermostats.
- Replace mercury-containing thermometers with alcohol-filled or digital thermometers.
- Recycle fluorescent bulbs and other mercury-containing products, such as batteries, thermostats and thermometers. Contact IDEM or your local solid waste management district for more information. (See Chapter 7: Resources).
- Clean up mercury spills properly. Follow the mercury spill guidance in Chapter 2.6.
- Replace any carpet that has been contaminated with mercury.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

DON'T:
- Clean up a mercury spill with a household or commercial vacuum cleaner.
- Discard mercury-containing products, such as thermometers, fluorescent bulbs, or batteries, in the trash.

POLYCHLORINATED BIPHENYLS (PCBs)

DO:
- Identify if your fluorescent lighting ballasts contain PCBs (at risk if installed before 1978.)
- Contact your local fire department immediately if you notice any burning smell in your fluorescent lighting ballasts.

PESTICIDES

DO:
- Keep your facility clean. Pests are looking for food and water.
- Apply integrated pest management (IPM) strategies wherever possible.
- Contract with an exterminator as necessary. Encourage the contractor to use integrated pest management strategies. The Office of the State Chemist has guidance on integrated pest management strategies for pest control companies. (See Chapter 7: Resources).
- Ensure that only certified staff members apply pesticides if you do not contract with an exterminator.
- Use pesticides only as directed on the label.
- Store pesticides out of children's reach.

DON'T:
- Apply pesticides when children or staff are present.

EMERGENCIES

DO:
- Maintain a first aid kit and a Red Cross first aid manual.
- Keep evacuation routes clear for access.
- Post emergency numbers by every telephone, including fire, police, and poison control.
- In the event of an earthquake, seek safety under a table or desk. If possible, shut off gas, electricity and water main controls.
- In the event of a tornado, seek safety in the basement or interior room, away from exterior walls.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

- In the event of a fire, activate alarm and evacuate the building to the planned sites established in the emergency action plan.
- In the event of a bomb threat, contact the police and fire departments and evacuate the building to the planned sites established in the emergency action plan.

FIRE SAFETY

DO:

- Practice good housekeeping at all times. Clean up spills immediately.
- Get a fire inspection annually.
- Comply with all Indiana fire and building laws. Contact your local fire department or Fire and Building Services at the Office of the State Fire Marshal.
- File new building plans with the Plan Review Division of the Department of Fire and Building Services before beginning construction.
- Report all fires to the fire department.
- Report any fire damage to the Child Care Health Section at the Family and Social Services Administration.
- Keep all stairways, halls, corridors, exits, and aisles lighted at all times and free from obstruction.
- Store flammable liquids in tightly sealed containers and in rooms inaccessible to children.
- Provide emergency lights for all interior stairways and corridors.
- Conduct and document fire drills as required or regularly.
- Extinguish cigarettes in designated smoking areas only.
- Install required fire alarm systems and fire extinguishers in a well-lit, easily identifiable area.
- Provide required exits in each room.
- Contact your local fire department to conduct an in-service training for staff and children on fire safety.

DON'T:

- Let trash accumulate, especially trash with combustible materials, such as paper, rags, and packing materials.
- Store materials under stairways.
- Use electric or gas portable heaters.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

BLOODBORNE PATHOGENS AND INFECTIOUS DISEASES

DO:

- Follow Universal Precautions.
- Use personal protective equipment to prevent exposure to blood or other potentially infectious materials.
- Dispose of infectious waste properly.
- Practice proper infection control procedures.
- Isolate children with infectious diseases and sanitize items with which they have come in contact.

DON'T:

- Allow staff or children with communicable diseases to have contact with other children.

HAZARDOUS CHEMICALS

DO:

- Ensure containers are labeled properly, including identity of the chemical, hazard warnings, and name and address of manufacturer.
- Ensure chemicals are locked and stored safely out of children's reach.
- In the event of a chemical-related accident, follow directions on Material Safety Data Sheets or call Poison Control.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

4.2 CLASSROOM

LEAD

DO:
- Wash children's hands frequently to prevent them from ingesting lead dust.
- Sanitize equipment and toys regularly to remove potential lead dust.

CARBON MONOXIDE

DON'T:
- Use portable, unvented, or open grate gas heaters or allow children to sleep in rooms with space heaters.

ASTHMA AND RESPIRATORY IRRITANTS

DON'T:
- Have animals with fur in the classroom if you have children with respiratory problems.

MERCURY

DO:
- Use digital or alcohol-filled thermometers for checking a child's temperature.

PESTICIDES

DO:
- Store food in tightly sealed plastic containers.
- Cover your trash.
- Eliminate standing water sources, such as puddles or leaking faucets.
- Keep an eye out for bugs, especially for their points of entry.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

EMERGENCIES

DO:

- Post your emergency action plan, including disaster evacuation procedures, in case of fires and other emergencies.

FIRE SAFETY

DO:

- Provide required exits in the classroom.

BLOODBORNE PATHOGENS AND INFECTIOUS DISEASES

DO:

- Practice proper infection control procedures when changing diapers.

HAZARDOUS CHEMICALS

DO:

- Ensure that you are using the correct solutions of bleach or other sanitizers or disinfectants.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

4.3 KITCHEN

LEAD

DO:
- Use cold water only for drinking or cooking.
- Run the cold water tap to flush any lead contaminants for at least 30 seconds at the beginning of the day or if the sink has been out of use for more than six hours.
- Ensure children eat nutritious, low-fat meals high in iron and calcium, such as spinach, tofu, lean pork or low-fat dairy products.
- Store food in glass, plastic, or stainless steel containers.

DON'T:
- Store food in glazed pottery or open aluminum or metal cans.

CARBON MONOXIDE

DO:
- Ensure gas-fueled stoves are working properly.
- Install and use an exhaust fan vented outdoors over gas stoves.

DON'T:
- Use a gas oven to heat your building.

ASTHMA AND RESPIRATORY IRRITANTS

DO:
- Use exhaust fans that vent outdoors over stoves to prevent moisture build up.
- Prohibit smoking in the kitchen.
- Run water through unused floor drains and sinks to prevent sewer gas.

MERCURY

DO:
- Use non-mercury thermometers that are food-service approved in refrigerators and freezers.
- Follow the guidance in Indiana's Fish Consumption Advisory if you prepare fresh fish.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

PESTICIDES

DO:

- Apply integrated pest management strategies, such as:
- Keep your kitchen clean and sanitary. Check in cracks and crevices frequently for food particles that may have fallen underneath and between. Use flashlights under shelves and under appliances.
- Store food in tightly sealed containers.
- Rotate your food stock.
- Cover trash.
- Eliminate standing water sources, such as puddles or leaking faucets.
- Keep food storage areas clean, especially beneath and behind shelves. Allow the distance of a full broom sweep between the bottom shelf and floor.
- Keep an eye out for bugs, especially for their points of entry.
- Wash and scrub fresh fruits and vegetables under cold, running cold water to remove pesticide residues.

DON'T:

- Apply pesticides when food is not stored in tightly sealed containers.
- Store food on the floor or in cardboard boxes.

FIRE SAFETY

DO:

- Eliminate grease build up on stove hoods and other equipment.
- Install fire extinguishers as directed by the State Fire Marshal and FSSA.

BLOODBORNE PATHOGENS AND INFECTIOUS DISEASES

DO:

- Require that kitchen staff members follow infection control practices to prevent communicable diseases, including: (this is an abbreviated list for the kitchen. Please see Chapter 3.1 for all infection control practices)
- Wash hands with soap and water BEFORE preparing or serving food and eating and AFTER using the toilet, sneezing, or coughing.
- Don't work if ill.
- Cover your nose and mouth when sneezing or coughing, then wash hands with soap and water.
- Sanitize all food surface areas, floors, and mops after each use.
- Don't reuse disposable items, such as paper towels, cups, plates, or silverware.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

4.4 BASEMENT OR UTILITY ROOM

LEAD

DO:
- Check water pipes for the presence of lead.

ASBESTOS

DO:
- Have a licensed asbestos inspector identify if pipe or furnace insulation contains asbestos.

RADON

DO:
- Test for radon in the basement in particular because radon usually enters from the ground through cracks in solid floors, construction joints, and gaps around service pipes, among other entry points.

CARBON MONOXIDE

DO:
- Vent gas water heaters outside.
- Ensure gas furnaces and other gas-fueled appliances are in good working order.

DON'T:
- Store gasoline-powered engines inside the facility.

ASTHMA AND RESPIRATORY IRRITANTS

DO:
- Clean and maintain your air ventilation system to control air pollutants.
- Install new air filters quarterly.
- Clean humidifiers.
- Clean evaporation trays in air conditioners and dehumidifiers.
- Clean drain pans and make sure they slant toward drain.
- Run water through unused sinks or drains to prevent sewer gas.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

MERCURY

DO:

- Investigate which items in the utility room or basement may contain mercury, such as fluorescent bulbs, or in pilot light sensors in clothes dryers, water heaters, and furnaces. (See mercury awareness brochure enclosed in this manual.) Put mercury recycle stickers (available from IDEM's Office of Pollution Prevention and Technical Assistance-see Chapter 7: Resources) on these items so they will be recycled rather than sent to the landfill at the end of their useful life.

PESTICIDES

DO:

- Apply preventive integrated pest management strategies in the utility room, such as:
- Clean the utility room regularly, eliminating food and debris.
- Eliminate water sources, such as leaking pipes. Hang mops off the floor and ensure floor drains are clear and buckets are dry.
- Keep an eye out for bugs, especially for their points of entry. Repair cracks and crevices in the floor and foundation.

DON'T:

- Store chemicals on the floor or in cardboard boxes.

EMERGENCIES

DO:

- Lock the utility or basement room door to keep children away from dangerous equipment or poisonous chemicals.

FIRE SAFETY

DO:

- If possible, shut off power in the event of a fire. However, evacuation is most important!
- Keep dust and grease off gas and electrical equipment.
- Store flammable liquids in tightly sealed containers away from appliances.

DON'T:

- Let trash accumulate near gas or electric appliances, especially trash with combustible materials, such as paper, rags, and packing materials.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

BLOODBORNE PATHOGENS AND INFECTIOUS DISEASES

DO:

- Sanitize mops after each use with a 100 parts per million bleach solution (approximately one teaspoon bleach to one gallon of water) or an equivalent sanitizing quantanary ammonia solution.

GENERAL SAFETY

- Regulate hot water with an approved hot water control valve that will not allow the water to exceed 120^{o}F (except for dishwashers or laundry machines).

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

4.5 BREAK ROOM AND OFFICE

ASTHMA AND OTHER RESPIRATORY IRRITANTS

DON'T:
- Smoke in the break room or office.

PESTICIDES AND CHEMICALS

DO:
- Apply integrated pest management strategies if you eat in the break room or office, including:
- Clean thoroughly, especially crumbs and spills.
- Store food in tightly sealed containers.
- Cover trash.

DON'T:
- Store food on the floor or in cardboard boxes.

GENERAL SAFETY

DO:
- Store hazardous items away from children, such as staff purses or backpacks, matches, lighters, or staff members' medications.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

4.6 BATHROOM

LEAD

DO:
- Check for corrosion in water pipes.
- Replace brass faucets, even if they say "lead safe."

ASTHMA AND RESPIRATORY IRRITANTS

DO:
- Use exhaust fans that vent outdoors to prevent moisture build up.
- Clean water damage to prevent mold, mildew, and bacteria.
- Run water through unused floor drains and sinks to prevent sewer gas.

PESTICIDES

DO:
- Apply integrated pest management strategies, such as:
- Clean and disinfect the bathroom according to your cleaning schedule.
- Eliminate water sources, including puddles and leaking faucets.
- Ensure floor drains are clear.
- Prevent entryways for pests around pipes or other plumbing.
- Keep an eye out for bugs, especially for their points of entry.

EMERGENCIES

DON'T:
- Store medications in the bathroom.

BLOODBORNE PATHOGENS AND INFECTIOUS DISEASES

DO:
- Disinfect the toilet after it is used by a child with a communicable disease.
- Wash hands BEFORE AND AFTER diapering and helping children use the toilet; BEFORE eating; and AFTER coughing, sneezing, or wiping noses.

DON'T:
- Use the bathroom sink for any purpose other than hand washing.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

4.7 LAUNDRY ROOM

LEAD

DO:
- Look for signs of corrosion in pipes.
- Wash clothes or rags that may have been exposed to lead-based paint or lead dust separate from regular loads. Ensure there are no lead-based paint chips in the washer. Run the empty washer through another cycle to rinse out any lead-based paint residue.

CARBON MONOXIDE

DO:
- Ensure gas clothes dryers are operating correctly.

ASTHMA AND RESPIRATORY IRRITANTS

DO:
- Vent clothes dryers outside to prevent moisture build up.
- Run water through unused floor drains and sinks to prevent sewer gas.

MERCURY

DO:
- Investigate which items may contain mercury in the laundry room, such as fluorescent bulbs, automatic or tilt shut-off irons, or in pilot light sensors in clothes dryers. (See mercury awareness brochure enclosed in this manual.)

PESTICIDES

DO:
- Apply integrated pest management strategies, such as:
- Clean laundry room regularly and keep free of debris.
- Eliminate water sources, such as puddles and leaking faucets, and make sure floor drains are clear.
- Keep an eye out for bugs, especially for their points of entry.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

BLOODBORNE PATHOGENS AND INFECTIOUS DISEASES

DO:

- Wash clothes or items soiled with blood or other body fluids in a washing machine in water above 160^0F for at least 25 minutes OR if your machine cannot meet that temperature requirement, then use household bleach (one cup bleach per top loading washer, 2 cup for bottom loading).

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

4.8 OUTSIDE

LEAD

DO:
- Have your soil tested if your home has been painted with lead-based paint, is near a lead smelter, or if bare soil on the playground was exposed to a parking lot or busy street prior to 1978.
- Check if your facility's exterior or playground equipment has lead-based paint.
- Check to see if your property could be exposed to lead-based paint from neighboring buildings or fences.
- Cover bare soil with grass or ground covering if it is at risk for lead-based paint chips or leaded gasoline vapor deposits.
- Clean toys that have been exposed to soil at risk for contamination.
- Clean shoes before entering a facility to prevent tracking in lead dust.
- Treat your well and water if you own a well or another public water source suspected of lead contamination. Contact the county or state health department, the Indiana Department of Environmental Management, or the National Sanitation Foundation (see Chapter 7: Resources) for assistance in obtaining well-treatment products.

DON'T:
- Let children drink out of outdoor spigots or hoses if the facility's water supply has not been tested and proven to be lead free.

ASBESTOS

DO:
- Ensure asbestos in roofing materials is contained.

RADON

DO:
- Seal cracks in the foundation or walls to prevent radon from entering through the ground.

CARBON MONOXIDE

DO:
- Store lawn mowers and other gas-powered engines only in ventilated, outdoor buildings.
- Ensure chimneys and fireplace flues are in good working order and open when the fireplace is in use.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

DON'T:
- Allow cars to idle in garages or near outdoor air intakes.

ASTHMA AND RESPIRATORY IRRITANTS

DO:
- Keep outdoor air intakes unobstructed. Clear debris or clogged screens.
- If you allow smoking, permit it only outdoors and out of sight from children.
- Keep children away from animal droppings, especially in soil, to prevent histoplasmosis.

DON'T:
- Locate pollutant sources, such as dumpsters, loading docks, or areas where cars idle, near outdoor air intakes.

POLYCHLORINATED BIPHENYLS (PCBS)

DO:
- Identify whether you have a PCB transformer. If you are unsure, request assistance from your electric utility.
- If you do have a PCB transformer, register it with fire response personnel and inquire if it must be equipped with enhanced electrical protection or removed from service.
- Inspect a PCB transformer quarterly for leaks.
- Contact your utility company immediately if you detect leaks.

PESTICIDES

DO:
- Apply integrated pest management strategies outdoors, such as:
- Secure window screens tightly and fix any holes. Use screens with 16-gauge mesh.
- Prevent entryways for pests by sealing cracks in the foundation and around pipes, plumbing, and ducts.
- Cover trash.
- Eliminate standing water sources, especially in tire swings.
- Keep playground free of poison ivy and other poisonous plants.

DON'T:
- Apply pesticides and lawn care chemicals when children or staff are present.
- Keep children off grass after chemical applications for as long as the label recommends.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

‘ **EMERGENCIES**

‘ **DO:**
‘ Identify where staff and children should meet outside in the event of an evacuation.

‘ **FIRE SAFETY**

‘ **DON'T:**
‘ Let combustible yard waste accumulate.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

4.9 ATTIC

ASTHMA AND RESPIRATORY IRRITANTS

DO:

- Ventilate the attic to prevent moisture build-up.
- Keep outdoor air intakes unobstructed. Clear debris or clogged screens.
- Clean water damage to prevent mold or bacteria.

PESTICIDES

DO:

- Keep an eye out for bugs and rodents, especially for their points of entry.

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

Chapter 5 By Profession

Ultimately, protecting children from environment threats and meeting your legal responsibilities is a matter of personal responsibility. Each member of the staff and management at a child care facility must accept responsibility for doing his or her part. This chapter takes the requirements and recommendations described in chapters 2 and 3 and organizes them by the different professionals that work at your facility. Review chapters 2 and 3 to determine which checklist items are required by law for your facility or are recommendations. In either case, every checklist item will help protect your children and staff from environmental, health, and safety concerns.

Dividing this guidance by profession will assist you in training and delegating responsibilities. The categories of professionals may not exactly match your organization. We used them because they reflect the typical categories at a medium-sized child care facility. They illustrate the basic differences in roles and responsibilities. However, you may have one person who serves in several roles. Or you may divide the roles among different people. Use this guidance only as a starting point.

IDEM recommends that your organization considers incorporating the guidance into position descriptions and performance appraisals for staff and management.

5.1 ALL PERSONNEL

Each staff member at your facility has a responsibility to protect children. The following requirements or recommendations apply to every one.

A. Environmental Health

- Run your cold water pipes before drinking to flush out potential lead contaminants.
- Ensure that all equipment, surfaces, and items with which employees and children come in contact are free of lead-based paint chips or dust.
- Use a door mat and wipe shoes to prevent potential lead dust and other toxins from entering the facility.
- Maintain friable asbestos in safe condition.
- Do not touch asbestos that you're leaving alone.
- Store food properly to prevent pests.
- Never spray pesticides when children are present.
- Read labels and use products correctly.
- Never idle cars in garages.
- Never use gas ovens to heat the facility.
- Never use or store gasoline-powered engines inside the facility.
- Never smoke around children.
- Open flues when fireplaces are in use to prevent carbon monoxide poisoning.
- Use exhaust fans to prevent mold and mildew.
- Cleanup mercury spills properly.
- Recycle batteries to keep mercury out of the waste stream.

B. Safety

- Practice good housekeeping at all times, keeping your facility free of debris.
- Do not use portable electric or gas heaters.
- Report fires and fire damage immediately.
- Keep all stairways, halls, corridors, exits, and aisles free from obstruction and lighted at all times.
- Contact your local fire department if you notice any burning smell in your lighting ballasts.
- Lock ammunition and firearms in areas inaccessible to children at all times.
- Store all pesticides and other chemicals away from children.
- Maintain equipment, materials, and furnishings in good, safe condition.
- Ensure that all chemical containers, such as cleaning solutions, are labeled properly.
- Know what to do in the event of a chemical-related accident.
- Lock and store hazardous items away from children.
- Safely store items to prevent trips or falls.
- Regulate hot water.
- Establish and practice Emergency Action Plans

Refer to chapters 2 and 3 for more information on each checklist item and to determine if it is required by law or is a recommendation.

C. Sanitation

- Practice Universal Precautions.
- Follow infection control practices when handling all body fluids.
- Wash hands BEFORE AND AFTER diapering, helping children with the toilet, preparing food, or eating, and AFTER using the restroom, wiping noses, playing outdoors, using art supplies, or handling pets or animals.

D. Environmental Stewardship

- Recycle, recycle, recycle! Materials accepted in most areas of the state include aluminum beverage or food cans, glass bottles and jars, plastic milk and water jugs, plastic drink and detergent bottles, steel food cans, newspapers, magazines, paper, and currogated boxes.
- Turn off lights when you leave rooms.

5.2 DIRECTORS

In most organizations, the responsibility for meeting compliance responsibilities usually lies with the director. The director may delegate or contract out the work, but the director still shares the responsibility.

The typical director of a child care facility wears many hats. The director is responsible for policy decisions, interaction with contractors or utilities, training, personnel management, and parent communications. The tasks described below reflect the broad nature of these responsibilities.

A. Making Policy Decisions

As a director, you need to make some difficult decisions that may make your facility more attractive to parents and staff but can pose a hazard to children. Examples include:

- Remove animals with fur in rooms with children who are allergic to animal dander.
- Prohibit smoking anywhere on your facility's grounds.

B. Interaction with Regulatory Agencies, Utilities or Property Managers

The director usually is the face of the facility when working with regulatory agencies, utilities, or the landlord. Typically, only the director has a broad enough view of the facility to ensure positive interactions. While the director may delegate specific interactions to facility staff, the director should stay involved and monitor the situation.

Landlord

- If you rent or lease space, contact your landlord regarding the presence of lead, asbestos, or any other environmental hazard.

Utility

- Contact your water utility regarding the potential presence of lead in the system.

Fire Department

- If you have a PCB transformer, it must be registered with fire response personnel.
- Maintain records of inspections, maintenance, and disposal of a PCB transformer.
- Receive a fire inspection annually.

State and Local Agencies

- Contact IDEM or your local health department immediately in the event of an asbestos release.

C. Contract Decisions

In many cases, you will have to rely on outside contractors to manage environmental, health, and safety threats at your facility. A director makes legally binding commitments for the facility and usually is responsible for the decisions regarding the selection, managment, and payment for contractors.

Contractors to Assess Situation

- Have your drinking water tested for lead whether you are served by a well or public utility.
- Get a lead risk assessment.
- Test at-risk children for lead.
- Test your soil if your facility is located near a lead smelter.
- Have a licensed inspector perform an asbestos inspection, especially before renovation.
- Test your building for radon.
- Use a state-certified radon tester or mitigator if you hire a professional to perform radon testing or mitigation (reduction).

Contractors to Address Situation

- Use a licensed contractor to remove lead-based paint if the intent is to remove the paint permanently.
- Use IDEM-licensed asbestos contractors.
- Ensure your contractor disposes of your asbestos properly.
- Contract with a licensed pest-control operator as necessary.
- Request that your pest-control operator uses Integrated Pest Management strategies.
- Use experts to fix a radon problem.
- Ensure contractors do not leave their equipment unattended and that they shut it off when not in use.

D. Develop Plans

Several regulations require the facility to have a written plan of action to address situations. Usually the director has the responsibility to write and enforce these plans, which are as follows:

- Develop a written Emergency Action Plan.
- File new building or alteration plans.
- Develop an exposure control plan.
- Develop an asbestos management plan.
- Develop a written Hazard Communication Program.

E. Providing or Arranging for Training

Training facility staff is one of the most critical tasks for a director. Well-trained employees make fewer mistakes and contribute to the overall healthy operation of your facility. Think of it as problem prevention. While directors may not do all the training, it is their responsibility to ensure the material is presented accurately.

Hazard Communication

- Train employees on the hazards of chemicals in the workplace.
- Communicate the hazards of asbestos to employees.
- Inform employees if there is a potential exposure to any level of airborne lead.
- Train staff to follow Universal Precautions to prevent HIV, Hepatitis B, and Hepatitis A transmission.

- Document Universal Precautions training.
- Educate staff on pest prevention and the proper and judicious use of pesticides.

Training Staff

- Train staff on emergency and disaster evacuation procedures annually.
- Practice emergency and disaster evacuation procedures.
- Provide fire extinguisher training as part of your mandatory safety training.
- Conduct and document fire drills.
- Request an in-service training on fire hazards.
- Provide first aid training.
- Train staff on recycling opportunities and energy efficiency measures they can take at your facility.

F. Personnel Management

Beyond training, there are several actions that you need to take to protect children and staff.

- Offer the Hepatitis B vaccination to employees free of charge.
- Prohibit staff or other persons with communicable diseases from having contact with children.

G. Facility Management

The director needs to ensure the physical facility operates properly. While staff may maintain the facility, it needs to be constructed and set up properly.

- Comply with Indiana fire and building laws.
- Comply with the requirements for an "E-3" occupancy if you are opening a child care facility in an existing building (for centers and ministries).
- Comply with state fire code if you use portable, unvented, oil-burning heating appliances in homes (they are absolutely prohibited in centers or ministries).
- Follow construction, design, and safety rules for swimming or wading pools at homes.
- Meet the definition of a residential structure for homes.
- If you are connected to well, treat it regularly to reduce leaching of lead and other hazardous chemicals.

H. General Safety

- Post emergency numbers by the telephone.
- Designate a smoking area if you permit smoking.
- Install an approved fire alarm system when required.
- Install fire extinguishers when required.
- Provide required exits.
- Maintain a first aid kit.
- During renovations, repair, or cleaning activities, protect your employees and construction workers, in addition to children, from the hazards of lead-based paint.
- Learn more about radon health risks, testing, and mitigation.
- Allow pesticides to be applied only by staff trained and certified by the state if you do not hire a licensed pest control operator.
- Provide personal protective equipment and supplies to prevent exposure to blood or certain other body fluids.
- Dispose of infectious waste properly.

I. Communicate with Families

- Notify parents when a child is suspected of having a communicable disease.
- Educate families about the Indiana Fish Consumption Advisory and items containing mercury.
- Educate families on the hazards of improper pesticide use.
- Educate families about recycling options in your community.
- Educate families about the energy efficiency measures you've taken at your facility and what they can do at home.

5.3 TEACHERS

Because teachers play a critical role in daily interactions with children and parents, they have important opportunities to protect and enhance the facility's environmental, health, and safety performance.

- Ensure children do not come into contact with lead-based paint chips.
- Report peeling paint to directors.
- Isolate children with communicable diseases.
- Prohibit staff or other persons with communicable diseases from having contact with children.
- Notify parents when a child is suspected of having a communicable disease.
- Sanitize or disinfect facilities or articles that have been used by a child suspected of having a communicable disease.
- Follow proper procedures for diapering.
- Disinfect diaper changing tables.
- Sanitize all food contact surfaces, counter tops, tables, toys, cots, and high chairs.
- Keep children away from soil with animal droppings to prevent histoplasmosis.
- Ensure food is cleaned up properly after meals and snacks.
- Monitor children's book bags and items from home for lice and other pests.
- In homes, never allow children to sleep in rooms with an unvented gas or kerosene space heater.

5.4 MAINTENANCE STAFF

Maintenance staff most often handle and secure hazardous materials. They must be educated on their proper and careful use and storage.

A. Inspections

- Ensure all paint surfaces that contain lead-based paint are not peeling or chipping.
- Ensure asbestos-containing materials remain encapsulated safely (DO NOT TOUCH OR DISTURB ASBESTOS-CONTAINING MATERIALS).
- Store flammable liquids in tightly sealed containers and in rooms inaccessible to children.
- Prevent entryways for pests.
- Ensure your gas equipment and appliances are in good working order.
- Inspect all fuel-burning appliances annually.
- Ensure that your air-ventilation system is clean.
- Keep outdoor air intakes unobstructed.
- If you have a PCB transformer, visually inspect it quarterly for oil leaks on the ground.
- Ensure that proper PCB identification labels are affixed to the transformer and any access materials.

B. Routine Maintenance

- Firmly secure carpets.
- Protect electrical outlets.
- Protect air-conditioning compressors.
- Leave lead-based paint alone before covering it.
- Cover lead-based paint.
- Discard paint chips safely.
- Do not use or store gasoline-powered engines inside the facility.
- Prevent moisture build-up to avoid mold and mildew.
- Eliminate water or food sources for pests.
- Clean humidifiers.
- Clean or remove water damage.
- Dispose of mercury waste properly.
- Recycle your fluorescent bulbs.

C. Selection of Maintenance Materials

- Replace mercury thermostats with electronic thermostats.
- Replace mercury thermometers with digital thermometers or alcohol (red or blue bulb) thermometers.
- Use low-odor, water-based paints.

D. Renovations or Alterations

- Do not perform any alterations or renovations with children or staff present.
- Vent gas water heaters outside.
- Use lead-free pipes and materials in remodeling or new construction.
- Install and use an exhaust fan vented outdoors over gas stoves.

5.5 CLEANING STAFF

Cleaning staff also handle hazardous chemicals and have the opportunity to reduce exposures. Because they clean areas where children may be present, their performance can have a significant impact on your children.

- Keep your facility clean and sanitary.
- Do not vacuum or sweep when children are in the building (except after meals or small clean ups).
- Sanitize or disinfect facilities or articles that have been used by a child suspected of having a communicable disease.
- Sanitize kitchenware with required heat OR a 50 parts per million bleach to water solution (approximately 2 teaspoon bleach to one gallon of water-test with chlorine test strips). This solution is for dishes or other items you submerge. They must be submerged for at least 60 seconds.
- Sanitize the following with a 100 parts per million bleach (approximately one teaspoon bleach to one gallon of water-test with chlorine test strips) or equivalent food-service approved quantanary ammonia solution: all food contact surfaces, counter tops, tables, food preparation areas, toys, cots, high chairs, floors (you may use a stronger solution on floors only, such as a disinfectant, but it is necessary only if blood is present).
- Disinfect the following with a 1:9, or 10% bleach solution (approximately one cup bleach to nine cups water): diaper changing tables, floors (only if blood is present), or other items that may have contact with body fluids, e.g., urine, blood, feces.
- Do not use disinfectant solutions on surfaces to be sanitized. The concentration is too strong and will leave a residue that can be injurious to children.
- Discard paint chips safely.
- Dust with wet rags or mops if you have lead-based paint in your facility.
- Wet clean carpets annually.
- Run water through unused floor drains and sinks to prevent sewer gas.
- Keep trash covered to prevent pests.

5.6 KITCHEN STAFF

Kitchen staff members have a unique responsibility to prevent the spread of health hazards through the proper preparation and clean up of meals.

- Prepare healthy, well-balanced meals with a variety of foods.
- Wash hands before cooking.
- Flush your cold-water pipes before drinking or cooking.
- Use cold water only for drinking or food preparation.
- Sanitize all kitchenware, including dishes, with appropriate chemicals or heat.
- Wash and scrub fresh fruits and vegetables with cold running water before preparing.
- Keep the kitchen clean and sanitary. Do not leave any food or water sources for pests.
- Store food items in sealable plastic containers, not cardboard.
- Follow the Indiana Fish Consumption Advisory to ensure proper preparation of fresh fish.
- Use non-mercury, food-service approved thermometers in refrigerators and freezers.

Chapter 6 Environmental Stewardship

In the preceding chapters, we discussed how to identify and address environmental threats. In this chapter we go a step further-how to prevent pollution by acting as responsible stewards of our environment. Guidance is provided on energy efficiency, recycling, and educational opportunities for your children and their families.

6.1 ENERGY EFFICIENCY

When you pay your gas or electric bill, you're not just paying for watts or BTUs. You're also paying for a piece of the planet. Electricity is derived from burning fossil fuels, such as coal, oil, uranium and natural gas. We all pay when we use up the Earth's natural resources. In many areas of the country, consumers are using alternative, renewable energy resources, from wind, water, or the sun, for example, but their use is still limited. The best way to save natural resources, and save money on your utility bills, is to use less energy. The following offers tips on energy conservation.

- **Conduct an energy audit.** Energy audits assess your facility's energy consumption and identify measures you can take to make it more energy efficient. You can conduct your own energy audit or hire a professional. See Chapter 7: Resources for information on professional energy audits. For a do-it-yourself audit, you can walk through your facility, keeping a checklist of areas you have inspected and problems found. This will help prioritize your energy efficiency upgrades. Inspect the areas listed below for air leaks. If you find air leaks, seal them properly with caulking, plugs, weather stripping, or other appropriate materials.
  - Windows
  - Doors
  - Electrical outlets
  - Switch plates
  - Window frames
  - Baseboards
  - Weather stripping
  - Fireplace dampers
  - Attic hatches
  - Wall- or window-mounted air conditioners
  - Around pipes
  - Around wires
  - Around electrical outlets
  - Around foundation seals.

  SAFETY NOTE: When sealing, always be aware of the dangers of indoor air pollution from gas-fueled appliances. In homes where a fuel is burned, e.g. natural gas, fuel oil, propane, or firewood) for heating, the appliance must be installed properly to have adequate outdoor ventilation.

- **Insulate properly.** Heat loss through ceilings and walls in your facility can be large if the insulation level is less than the recommended minimum. Check to see if the level of the attic and wall insulation is at least at the minimum recommended amount, which may be different today than when your facility was constructed. The Energy Efficiency and Renewable Energy Network (EREN) of the U.S. Department of Energy can help you evaluate your insulation level (See Chapter 7: Resources). To avoid fire hazards, allow a three-inch space between insulation and light fixtures, unless the fixture is IC (insulation covered) rated. If your basement is unheated, there should be insulation under the floors covering the basement. If your basement is heated, the walls should be insulated properly. Water heaters, hot water pipes, and furnace ducts also should be insulated.

SAFETY NOTE: In many older buildings, pipe insulation contains asbestos. Do NOT disturb this insulation (see Chapter 2.2 for more information on asbestos)!! When asbestos is disturbed, it may become friable, which is an extremely dangerous health hazard. Only licensed asbestos professionals should work with asbestos-containing materials!

‘ **Maintain heating and cooling equipment.** Inspect heating and cooling equipment annually, or as recommended by the manufacturer. If you have a forced-air furnace, check and replace filters regularly. Generally, filters should be changed about once every month or two, especially during periods of high usage. A professional should check and clean HVAC equipment annually. If the unit is more than 15 years old, consider replacing it with newer, energy-efficient units. Also, check duct work for dirt streaks, especially near the seams. Dirt streaks indicate air leaks, which should be sealed with metal-backed duct tape or a duct mastic. Insulate any ducts or pipes that travel through unheated spaces.

‘ **Use low-wattage and low-mercury lighting.** Lighting accounts for 20-25% of electricity consumed in the United States. Examine the wattage size of your bulbs. Do you really need that much wattage to light each room efficiently? Common fluorescent tubes need ballasts (pre-1976 models may contain PCBs-see Chapter 2.7 for more information) for starting. The electrical current in a flourescent tube is conducted through inert gases and mercury, which is a toxic substance when released if the tube breaks. Since fluorescent tubes contain this hazardous material, you should not dispose of burned-out lamps in the regular trash. (See Chapter 7: Resources for fluorescent tube recycling options.) Contact your local solid waste management district for guidance on recycling fluorescent bulbs in your area.

Compact fluorescent lamps (CFL) are the most significant lighting advance developed in recent years. They combine the efficiency of fluorescent lighting with the convenience and popularity of incandescent fixtures. CFLs can replace incandescent bulbs that are roughly three to four times their wattage, saving up to 75% of the initial lighting energy. Although CFLs cost from 10 to 20 times more than comparable incandescent bulbs, they last 10 to 15 times as long. This energy savings and superior longevity make CFLs one the best energy efficiency investments available. They are most efficient in areas where lights are on for hours at a time. Check with your electric utility to see if it offers rebates or other incentives for purchasing these and other energy-efficient bulbs.

6.2 RECYCLING

The 3-Rs you learned in school also apply to conserving resources and keeping waste out of Indiana's landfills. This section discusses the environmental 3-Rs: Reduce, Reuse, and Recycle. Some trash facts:

< The typical American generates about 4.4 pounds of garbage per day (U.S. EPA, 1996).
< A high percentage of what we throw away is RECYCLABLE!
< Packaging alone accounts for almost one-third of municipal solid waste.
< By following the 3-Rs, we all can reduce the waste stream significantly, prevent pollution, and conserve our natural resources. The "Rs" are listed in order of impact, with the greatest impact first.

REDUCE

‘ Reduce packaging by buying in bulk or economy-size packages.
‘ Choose products in refillable, instead of single-use, containers.
‘ Buy concentrated products and mix in refillable containers (label all chemical containers properly and keep them out of children's reach).
‘ Avoid disposable products when possible.
‘ Bring your own cloth, string, or paper bags to the supermarket.
‘ Print on both sides of paper.

REUSE

‘ Use products that are made to be reused such as cloth diapers, towels, and rags.
‘ Use clean milk cartons or the unused side of paper for scratch paper or art projects.
‘ Mend, give away or reuse old clothes as rags or as painting attire rather than throw them away.
‘ Repair broken appliances.
‘ Purchase goods at second-hand stores, junk yards, or yard sales to reduce unnecessary production.

RECYCLE

Recycling begins in the store when we choose products packaged in or made from recycled or recyclable materials. Contact your local solid waste management district to learn what contractors will pick up in your area or what you can drop off (see Chapter 7: Resources). The district also may be able to pair you up with a neighboring business that will take your recyclables, such as soft drink cans or cardboard, as a community service. Common recyclables include:

‘ aluminum beverage or food cans
‘ glass bottles and jars
‘ plastic milk and water jugs
‘ plastic drink and detergent bottles
‘ steel food cans
‘ newspapers and magazines
‘ paper and corrugated boxes

Many solid waste management districts also accept hazardous waste, such as fluorescent bulbs or paint cans, but businesses usually have to pay to dispose of these hazardous wastes.

BUY RECYCLED

The proof that recycling really pays for the environment is that the paper, plastic, metal, and glass we've been recycling is being re-manufactured into new products. However, the only way industry will continue to invest the necessary time and money to manufacture these recycled products is if people

purchase them. By purchasing recycled products you help increase the market demand for recyclable materials, while reducing the need for raw, virgin materials.

This symbol means the product or packaging contains recycled material. These types of products and packaging usually list their recycled content. But beware-this symbol doesn't necessarily mean that a product has any "post-consumer" recycled content, which means the material was already used, then recycled. Look for the percentages of post-consumer content. Compare labels to find the product or packaging with the highest percentage post-consumer recycled content.

More tips on buying recycled:

- Read labels. Look for the words recycled content or made from recycled materials.
- Ask the businesses where you shop what recycled-content products they stock. Let them know you recycle and that you want to buy recycled-content products. Encourage store managers to order more.
- Call manufacturers to express your preferences, also. Package labels usually include the product-makers' toll-free number.

WHAT CAN I BUY RECYCLED?

Office and classroom supplies. Almost every kind of paper product is available with recycled content. Along with paper, consider these other recycled-content products: binders, calendars, computer disks, desktop accessories, file folders, paper clips, pencils, pens, self-stick notes, staplers, trash bags, and more. With the increased demand for recycled products, many supply catalogs are offering more products with recycled content.

Outdoor equipment. Bird feeders, playground equipment, recycled plastic picnic tables, lawn furniture, rubber mats, rubber soaker and garden hoses, wood chips, sand boxes, trash and recycling receptacles, crumb rubber tire playground material, mulch, and steel lawn implements are just a few of the outdoor products made with recycled materials that are available.

Remodeling materials. There are a number of recycled-content materials that can be used for construction or remodeling, including glass counter top tiles, carpet made from recycled plastic soda bottles, and insulation made from newspaper.

Many "Buy Recycled" resources exist! Please see Chapter 7: Resources for contacts.

6.3 EDUCATIONAL PROGRAMS FOR CHILDREN

Teaching children early about the importance of caring for their Earth is a lesson they will carry through their lives. This section provides programs for child care teachers to begin using immediately, as well as references and resources to obtain educational materials. Included are stories that teach children about the environment, games, activities, and additional environmental education resources.

Story Time

Story time is a great time to teach kids about the environment. Many children's book authors have written stories that teach children the importance of a healthy environment for people, plants, and animals. Many of these books can be found electronically as well as in hard copy. Here are two lists of children's books with environmental themes. These lists are included as information only. IDEM does not endorse any of these materials.

The first is a list of books in print that can be purchased at a bookstore or the publisher, or borrowed from your local library. You can ask your library to carry these books if they don't have them.

These book can be purchased through the Sierra Club at http://www.sierraclub.org/books or by calling (800) 935-1056:

- **African Animals ABC**, by Philippa-Alys Brown.
- **My First Nature Treasury**, by Lizann Flatt.
- **What About Ladybugs?**, by Celia Godkin
- **Who Lives Here?**, by Maggie Silver

At the library or bookstore:

- **The Lorax**, by Dr. Seuss
- **Circle of Seasons**, by Myra Cohn Livingston
- **The Wump World,** by Bill Peet

Electronic Books Online:

- **Adventures of the Garbage Gremlin**, U.S. EPA at http://www.epa.gov/epaoswer/non-hw/recycle/gremlin/ , or can be ordered by calling (800) 490-9198 (order #EPA530SW90024).
- **When Greenville Turned Brown**, U.S. EPA at http://www.epa.gov/superfund/oerr/comtools/green/page1.htm.
- **Brucie and the Gang Protecting the Rivers**, by Southland Regional Council at http://www.southnet.co.nz/brucie/html/river_protection.htm.

Environmentally Focused Activities

Games and fun activities are another way to teach children about the environment. Games keep the activities fun while the learning occurs. It's easy to turn any game into an environmental lesson.

< Treasure Hunt: Have children pretend they are animals looking for food, identifying different aspects of their natural environment or searching for materials that can be recycled.
< Trash Pick Up: Have a pick up time, where the children pick up litter. Make sure there are no sharp or dangerous objects and children wash their hands thoroughly afterward.
< Finger Painting: During finger painting, children can paint environmental scenes, such as animals that live in the water, on land, or in the air.

Other games and activities that are designed to teach about the environment (see Chapter 7: Resources to find these games at U.S. EPA):

< The Lorax's Save the Trees Game. Available online only at http://www.randomhouse.com/seussville/games/lorax.
< What's Wrong with This Picture? U.S. EPA
< Smell an Onion, U.S. EPA
< Recycling Maze: Help Smogbusters Find the Recycling Center, U.S. EPA
< Incredible Edible Chemical Landfill, U.S. EPA
< Crafts from Unwanted Items, U.S. EPA
< A World Fit for Chipmunks and Other Living Things, Story and Coloring Book, U.S. EPA
< The Happy Earth Day Coloring and Activity Book, U.S. EPA. Available online at http://www.epa.gov/region5/happy.htm , or can be ordered by calling (800) 490-9198 (order # 905-M90-002).

Finding Environmental Education Materials

Here are a few examples of where to look for additional environmental educational materials:

< U.S. EPA Teachers Lounge - Resources. Online at http://www.epa.gov/region7/kids/teachres.htm.
< U.S. EPA environmental curricula. Online at http://www.epa.gov/epahome/students.htm.
< Acorn Naturalist: Children's Environmental Literature Books. Catalogue online at http://acorn-group.com/p7229.htm , or call (800) 422-8886.
< Kids for a Clean Environment, Energy Education Resources Guide. Free membership to children and teachers. Online at http://solstice.crest.org/social/eerg/kface.html , or call (800) 952-3223.

6.4 EDUCATIONAL PROGRAMS FOR FAMILIES

Following are suggested guidelines and formats to educate your children's families about environmental issues. Included are tips for writing letters to parents about environmental threats at the facility and in their homes, suggestions for conducting evening workshops, and suggestions for producing newsletter articles.

Informing Parents of Environmental Hazards at the Child Care Facility
Even after performing self assessments, changing behaviors, and correcting problems, environmental hazards still may be present at a child care facility. When this happens, child care workers may need to inform parents of the potential hazards to their children. There are productive ways of informing parents about risks without inciting drastic reactions. The following tips are a guideline for child care facility directors to use when writing a letter to parents to notify them of a potential environmental hazard at the child care facility.

Tips for Informing Parents of Environmental Hazards

1. Meet the needs of your audience.

Think about what parents need to know and address parents' concerns. Introduce the hazard briefly then address parents' concerns. Parents likely will want to know if their child already has been affected, what the potential effects are on their child, and if there are symptoms for which they should be looking. Expect that their first question will be: Is my child safe at your facility? They also will need to know if their child care will be affected. Will the facility still be open? Do they need to make alternative arrangements, or will the facility make the arrangements? These issues should be addressed first.

2. Explain the hazard.

The next section of the letter should address the hazard itself. Chapters 2 and 3 of this guidance manual provide information on many environmental, health, and safety hazards that could exist in child care facilities; however, you may want more guidance. The U.S. Environmental Protection Agency (EPA) and the Indiana Department of Environmental Management (IDEM) can help. The EPA provides fact sheets and brochures on many environmental problems online at http://www.epa.gov, try looking under the heading "concerned citizens." If you do not have Internet access, IDEM has a fax-on-demand system that allows callers to request information that can be faxed to them (see Chapter 7: Resources).

When explaining environmental hazards, remember to include the following information:

- *What is the hazard?* Give a definition and the cause of the hazard.
- *What are the possible health effects?* Be sure to include symptoms that parents may want to check for in their children. If possible, try to include the range of symptoms. For example, "In mild cases look for these symptoms...; in severe cases look for these symptoms... ."
- *What can be done about the hazard?* This section would include explanations of tests to detect the health problem or to detect if the child was exposed. In some cases, describe the treatments for health effects, if feasible.

3. Explain actions to reduce the hazard.

Although it may be tempting to discuss the actions that the facility is taking to address the hazard earlier in the letter, these actions will be perceived as more logical and more responsive if discussed after the

hazard is explained. This section will describe your response to the problem. Are you changing the water supply? Will you be modifying staff behaviors to reduce the risk? Is a licensed contractor encapsulating the asbestos? Are you covering lead-based paint? Do parents need to take action to reduce the problem? Or, does the facility need to close for a period of time to install new equipment?

If appropriate, also discuss what parents can do to help reduce the risk. Is the problem something that parents may be facing in their homes? Are there precautions that will help reduce risk? For example, eating certain foods can help protect children from having high blood lead levels, or flushing out cold drinking water for 30 seconds each morning can help prevent lead contamination.

4. Provide an outside source of information.

Parents will undoubtedly have questions. Many of their questions may be beyond the ability of your staff to answer. Also, your facility will appear more credible if it willing to provide outside sources of information. Local health departments, doctors, IDEM, and the U.S. EPA all are good sources of information for environmental hazards. Many hazards, like lead and radon, have hotlines to call for questions or additional information. Be sure to provide phone numbers in your letter. If possible, include informational pamphlets or brochures with your letter. See Chapter 7: Resources for ideas.

5. Be accessible.

Be sure to include a phone number and times when the person signing the letter can be reached for questions or more information. Your letter and your word will appear more credible if you are accessible.

Evening Workshops

Holding evening workshops can be an excellent tool to educate parents about environmental issues, and much more. Evening workshops will help parents and child care staff get to know each other better and interact more. It also will help parents become more comfortable with their child care providers. Interactions through evening workshops can show parents that you are concerned not only about their children's health while at the facility, but also about the health of their families at home. Following are two ideas to organize evening workshops for parents.

Issue of the Month

One way to organize evening workshops is to sponsor a series of information sessions on regular meeting dates (for example, the first Thursday of each month). One month the workshop could be about reducing children's exposure to lead, another month it could be on easy ways to recycle, the next month on asbestos, etc. Much of the information contained in this guidance manual can become the basis for the workshop. Supplement this information with pamphlets and brochures from organizations like U.S. EPA and IDEM, or environmental and health groups. Often these organizations can spice up a workshop by providing videos or guest speakers. It is a good idea to rely on outside organizations for their expertise. It will take the pressure of answering technical questions off of you.

Mock Self Assessment as an Example Home Audit

Another way to teach parents about environmental hazards is to do it the same way the child care staff learned--by conducting a self assessment. The child care staff can conduct a sample child care facility audit and walk parents through the facility. Parents can then take what they learned and conduct a self assessment in their own home. Conducting a mock self assessment for parents has two benefits: 1) it will teach parents how to look for environmental hazards in their home and how to reduce those risks; 2) it

will show parents that their children are protected in the child care facility. By conducting a mock self assessment, parents will learn in a visual, interactive manner that is more interesting than reading a pamphlet or listening to a lecture. You can contact IDEM for additional copies of the self assessment you completed. Again, it is a good idea to have supplemental information available about potential environmental, health, and safety threats at the mock self assessment.

Here are some tips for conducting evening workshops:

1. Hold the workshop at the same time parents pick up their children. This time should help increase attendance.
2. Continue to provide child care throughout the workshop so parents can focus on the information.
3. Provide snacks. It will be dinner time for many families. Consider having a pot-luck dinner. It will allow you to interact with the parents in a more social manner. This will help build a sense of community around the child care facility.
4. Have information parents can take home and read later to reinforce their learning.
5. Be prepared to answer questions about what the child care facility has done to address the problem(s) being discussed.
6. When explaining environmental risks, be sure to include the following information:
   a. Define the risk. What is it? Where does it come from?
   b. Why is it a problem? Why should one be concerned? What are the health risks?
   c. How are parents and children exposed to the risk? How do people come in contact with the problem?
   d. What are the symptoms of exposure to the problem? What should parents look for in their children?
   e. How can parents reduce exposure to the risk, or reduce the problem in their home?

Newsletters

Newsletter articles are an easy and inexpensive way to inform parents about possible environmental hazards. The options for content and format are limited only by creativity.

Here are some ideas for telling parents about environmental hazards in a newsletter.

- Write an environmental column. Highlight an environmental issue of the week, month, quarter (however often the newsletter is printed). This way the newsletter can include detailed information about the issue.
- Discuss changes the child care facility made or is making to protect children from environmental hazards.
- Inform parents about environmental curriculum the facility is using to teach children about the environment. Teach parents about the same issues so that they can reinforce the lesson at home. For example, if your facility uses a game to teach children about recycling, then explain the game to parents and provide information about recycling and how parents can recycle at home.
- Give advice about how parents can reduce environmental hazards in the home.
- Provide a “Where to find more information” box that gives hotline phone numbers and other information sources for parents who have questions.

Chapter 7 Resources

The following resources will help you get additional information to identify and address environmental, health, and safety threats at your child care facility.

7.1 STATE AGENCIES

Indiana Department of Environmental Management
Office of Pollution Prevention and Technical Assistance
150 W. Market St., Suite 703
P.O. Box 6015
Indianapolis, IN 46220
800-988-7901 or in Indianapolis call (317) 232-8172
www.state.in.us/idem/oppta
For environmental questions and referrals for more information in this guidance manual.

Indiana Department of Environmental Management
Office of Air Management, 10th Floor
Indiana Government Center North
100 N. Senate
P.O. Box 6015
Indianapolis, IN 46206-6015
Phone: (800) 451-6027 (Toll-free in Indiana)
www.state.in.us/idem/oam
For more information on lead or asbestos regulations.

Indiana Department of Environmental Management
Office of Water Management, Drinking Water Branch
2525 N. Shadeland Ave.
Indianapolis, IN 46219
Phone: (800) 451-6027, press 0 and ask for ext. 308-3308 or in Indianapolis call (317) 308-3308
www.state.in.us/idem/owm
For more information on lead in drinking water or other drinking water issues.

Family and Social Services Administration
Child Care Health Section
Division of Family Children
Indiana Government Center South
402 W. Washington St. Room W386
Indianapolis, IN 46204
www.state.in.us/fssa
For information about child care licensing requirements, call (317) 232-4469. For information about registered child care ministeries or food, health, and sanitation requirements, call Dotty Broad at (317) 232-4467.

Fire & Building Services
Indiana Government Center South
402 W. Washington St., Room E241
Indianapolis, IN 46204-2739
www.state.in.us/sema/osfm.html
Phone: (317) 232-2222 or (800) 423-0765
Fax: (317) 233-0307
For more information about fire and building codes.

Indiana Department of Labor
Indiana Occupational Safety and Health Administration
402 W. Washington St., Room W195
Indianapolis, IN 46204
(317) 232-2693
www.state.in.us/dol
For information on Occupational Safety and Health Administration (OSHA) requirements, including asbestos, lead, Universal Precautions, and Bloodborne Pathogens.

Indiana Department of Labor
Bureau of Safety, Education and Training
402 W. Washington St., Room W195
Indianapolis, IN 46204
(317) 232-2688
www.state.in.us/labor/busets/buset.html
For free and confidential assistance regarding Occupational Safety and Health Administration (OSHA) requirements.

Indiana State Department of Health
2 North Meridian St.
Indianapolis, IN 46204
(317) 233-1325
www.state.in.us/isdh
*For more information about health issues, including radon and lead; see also county health departments in section 7.*11.

7.2 CHILD CARE RESOURCES

Family and Social Services Administration
Child Care Health Section
Division of Family Children
Indiana Government Center South
402 W. Washington St. Room W386
Indianapolis, IN 46204
www.state.in.us/fssa
For information about child care licensing requirements, call (317) 232-4469. For information about registered child care ministeries or food, health, and sanitation requirements, call Dotty Broad at (317) 232-4467.

Indiana Association for Child Care Resource and Referral (IACCRR)
IACCRR provides a wide range of resource and referral information and services to child care providers, including technical assistance, staff development and training, and literature. Counties are listed in boldface to assist you in locating the IACCRR field agency closest to you.

1. Child Care Resource & Referral
Purdue University Calumet
2200 169th Street
Porter Hall E 122
Hammond, IN 46323
Phone: (800) 357-7962 or (219) 989-3237
Fax: (219) 989-3237
Email: ANDERSOP@CALUMET.PURDUE
LAKE
Contact: Patty Anderson, Jan Levy

   South County Office:
Child Care Resource & Referral
5221 Fountain Drive
Crown Point, IN 46307
Phone: (219) 756-7527
Fax: (219) 756-7528

2. 4 C's of St. Joe
425 N. Michigan Street, Suite 208
South Bend, IN 46601
Phone: (219) 289-7815 or (800) 524-4533
Fax: (219) 289-1922
ST. JOE, ELKHART
Contact: Suzanne West, Sara Smigielski (ext. 2)
Fourcs@skyenet.net

3. Early Childhood Alliance
3320 Fairfield Avenue
Fort Wayne, IN 46807
Phone: (219) 745-2501 or (800) 423-1498
Fax: (219) 744-3473
ALLEN, DEKALB, NOBLE, LAGRANGE, STEUBEN, WHITLEY
Contact: Chris Weaver, Nancy Borgmann, Kay Hiester
Cweaver@ecalliance.org

4. ConneXions
316 N. 3rd Street
Lafayette, IN 47901
Phone: (765) 742-7105 or (800) 932-3302
Fax: (765) 742-3421
Email: ConnXRR@aol.com
BENTON, CLINTON, FOUNTAIN, TIPPECANOE, WARREN, WHITE
Contact: Marilyn Redmon*, Kurt Burnett

5. YWCA of Kokomo
406 E. Sycamore Street
Kokomo, IN 46901
Phone: (800) 328-1347
Fax: (765) 457-4416
Email: knepley@mailcity.com
FULTON, CASS, MIAMI, WABASH, HOWARD, TIPTON
Contact: Dottie Knepley*, Vicki Douglass

6. Community & Family Services, Inc.
521 South Wayne Street
Portland, IN 47371
Phone: (219) 726-9318 or (800) 531-4403
Fax: (219) 726-9174
Email: hsrr@jayco.net
ADAMS, BLACKFORD, JAY
Contact: Lora Schlosser, Pat Karn, Patsy Bost

7. 4 C's of Wabash Valley
1801 N. 6th Street, Suite 600
Terre Haute, IN 47804
Phone: (812) 232-3952 or (800) 886-3952
Fax: (812) 232-1731
VIGO, VERMILLION, CLAY, PARKE, PUTNAM, OWEN
Contact: Kelly McGoffney, Diana Kyle
Ccchcare@gte.net

8. Child Care Answers
615 N. Alabama, Suite 430
Indianapolis, IN 46204
Phone: (317) 631-4643 or (800) 272-2937
Fax: (317) 687-6248
Email: ccanswers@netdirect.net
Mindy Holsapple:
MindyH@daynursery.org
MARION, HENDRICKS, HAMILTON
Contact: Marsha Hearn-Lindsey, Linda Kolbus, Mindy Holsapple* (ext. 224)

9. Huffer Memorial Children's Center, Inc.
2000 N. Elgin Street
Muncie, IN 47303
Phone: (765) 284-0887 or (800) 554-9331
Fax: (765) 289-0430
Email: CCRR9@aol.com
DELAWARE, HENRY, MADISON
Contact: Alison Bishop, Judy Miller, Cyndi Leedy*

10. Wabash Valley Human Services
525 North 4th Street, P.O. Box 687
Vincennes, IN 47591
Phone: (812) 882-7927 ext. 230 or (800) 972-1793
Fax: (812) 895-9222
Email: Skahre@wvhs.org
Marango@wvhs.org
KNOX, GREENE, DAVIESS, SULLIVAN
Contact: Stacey Kahre, Marcie Arango

11. Child Care Services
401 N. Morton
P.O. Box 100
Bloomington, IN 47402
Phone: (812) 349-3463
Fax: (812) 349-3483
Email: Bueckers@city.bloomington.in.us
MONROE
Contact: Robin Bueckers

12. Wayne County Child Care
P.O. Box 2430
1900 South "L" Street
Richmond, IN 47375
Phone: (765) 965-7140 or (800) 837-3304
Fax: (765) 966-0530
Email: lmtruman@juno.com
WAYNE
Contact: Lois Truman

13. Tri-Cap
203 W. 6th Street
Jasper, IN 47546
Phone: (812) 482-2233
Fax: (812) 482-1071
Email: tricapcc@psci.net
DUBOIS
Contact: Dana Wilson, Patty Taylor

14. Orange County Child Care
600 Elm Street
P.O. Box 109
Paoli, IN 47454
Phone: (812) 723-2273 or (812) 936-2141 or 1-800-395-2273
Fax: (812) 723-2980
ORANGE, LAWRENCE
Contact: Robin Brown (Orange County
Danetta Reynolds (Lawrence County) Phone: (812) 278-8386
Fax: (812) 278-8393
Email: lcccrr@quik.com

15. LaPorte County Information, Resource & Referral
901 Michigan Ave.
LaPorte, IN 46350
Phone: (219) 325-0008 (Primary Phone)
(800) 246-1050 (Secondary Line-Michigan City Only)
(219) 325-9622 ext. 318 (Third Line)
Fax: (219) 325-3600
Email: thegrafs@home.com
LAPORTE
Contact: Renee Graf, Cindy Waelbroeck

16. Porter-Starke Counseling Centers
1003 Edgewood Drive
Knox, IN 46534
Phone: (219) 772-4040
Fax: (219) 772-7144
STARKE
Contact: Charity Edwards

17. Child Care of Marshall County
314 E. Jefferson Street, Suite B
Plymouth, IN 46563
Phone: (219) 936-6043
Fax: (219) 936-9904
Email: ccmc@dnsonline.net
MARSHALL
Contact: Ruth Doyle

18. Combined Community Services
110 E. Prairie Street
Warsaw, IN 46580
Phone: (219) 269-6194
Fax: (219) 269-2137
Email: ccs@kconline.com
KOSCIUSKO
Contact: Pam Houser, Heather Ousley

19. Family Service Society, Inc.
428 S. Washington Street, Suite 327
Marion, IN 46953
Phone: (765) 662-9971
Fax: (765) 651-6563
Email: r_rgrantco@yahoo.com
GRANT
Contact: Donna Loeffler

20. ICAP
P.O. Box 449
615 S.R. 38 West
New Castle, IN 47362
Phone: (765) 529-4403
Fax: (765) 593-2510
Email: Jharvey@comsys.net
HANCOCK, RUSH
Contact: Jennie Harvey

21. Child Care S.O.U.R.C.E.
520 S. Main Street
Martinsville, IN 46151
Phone: (765) 342-3948
Fax: (765)342-1274
Email: Prich@reliable-net.net
MORGAN
Contact: Peggy Miller, Pat Richardson, Mary Moore

22. Landmark Services, Inc.
531 Central Avenue
Connersville, IN 47331
Phone: (765) 827- 5053
Fax: (765) 827-6330
Email: Myrahisle@hotmail.com
FAYETTE
Contact: Myra Hisle

23. Community Care in Union County, Inc.
302 Harrison Street
Liberty, IN 47353
Phone: (765) 458-5553
Fax: (765) 458-7492
Email: michele@si-net.com (Jennifer English)
UNION
Contact: Nicole Carpenter

24. Brown County Child Care
121 Locust Lane
P.O. Box 63
Nashville, IN 47448
Phone: (812) 988-7686
Fax: (812) 988- 1279
Email: mspiker@bluemarble.net
BROWN
Contact: Marcia Spiker, Lori Williams

25. First Call for Help
522 Franklin Street
P.O. Box 827
Columbus, IN 47202-0827
Phone: (812) 376-0011
Fax: (812) 375-2217
Email: kimjbaker@usa.net
BARTHOLOMEW
Contact: Kim Baker

26. Kankakee Valley Jobs Training Program, Inc.
150 Lincolnway, Suite 2001
Valparaiso, IN 46383
Phone: (219) 464-4861 or (800) 995-2579
Fax: (219) 464-2881
Email: aamcgillkv@hotmail.com
(Alicia McGill)
PORTER
Contact: Alicia McGill

27. S.I.E.O.C.
110 Importing Street
P.O. Box 240
Aurora, IN 47001-0240
Phone: (812) 926-1585 or (800) 755-8558
Fax: (812) 926-4475
Email: childcare@sieoc.org
FRANKLIN, RIPLEY, DEARBORN, OHIO, SWITZERLAND
Contact: Beverly Henry, Angela Earls, Kristal Scott

28. Jackson County Child Care Resource Center
210 W. 2nd Street
P.O. Box 94
Seymour, IN 47274
Phone: (812) 523-5168
Fax: (812) 523-8139
Email: ccrc@hsonline.net
JACKSON
Contact: Janice Read, Penny McCarthy

29. D.C.M.I.
117 S. First Street
Zionsville, In 46077
Phone: (317) 873-1420 or (800) 233-0934
Fax: (317) 873-6777
Email: depcare@aol.com
Contact: Sally Lacey* **(STATEWIDE)**

(GIBSON / PIKE)
601 N Blain Street
Princeton, In 47670
Phone: (812) 385-3457 or (800) 805-8028
Fax: (812) 385-2993
Email: anjochbe@juno.com
Contact: Angela Christie

(HUNTINGTON)
604 William Street
Huntington, IN 46750
Phone: (219) 358-0790
Fax: (219) 356-4631
Email: kidcare@ctlnet.com
Contact: Anita Shepherd

30. Ohio Valley Opportunities, Inc.
711 Green Street
Ward #4 Madison State Hospital
Box 1159
Madison, IN 47250
Phone: (800) 928-1232
Fax: (812) 265-5850
Email: scox@seidata.com (Stephanie Cox)
JEFFERSON, SCOTT
Contact: Stephanie Cox*

Ohio Valley Opportunities, Inc.
407 S. Gardner Street
Scottsburg, IN 47170
SCOTT
Contact: Leslie Rigsby, Casey Goode
Phone: (812) 752-3146
Fax: (812) 752-6094
Email: ovosbg@hsonline.net

31. Career Choices, Inc.
1272 N. Main Street
Mt. Vernon, IN 47620
Phone: (812) 838-5581 or (800) 916-0019
Fax: (812) 838-5582
Email: kshufnagel@netscape.net
POSEY
Contact: Karen Hufnagel

32. Evansville Area 4 C's
1100 W. Lloyd Expressway, Suite 115
Evansville, IN 47708
Phone: (812) 423-4008
Fax: (812) 423-3303
Email: EVV4C@child-care.org
VANDERBURGH, WARRICK
Contact: Helen Farmer, Erin Ramsey*

33. Perry/ Spencer CCR&R
P.O. Box 427
Tell City, IN 47586
Phone: (812) 547-2299 or (800) 823-5439 (Spencer County residents only)
Fax: (812) 547-0939
Email: Kgkleeman@psci.net or lgreed@psci.net
Web: www.psfirstepahead.org
SPENCER, PERRY
Contact: Kaye Kleeman

34. Youth Action Community Council
127 W. Main Street #311
P.O. Box 803
Lebanon, IN 46052
Phone: (765) 482-0498
Fax: (765) 482-0674
Email: yacc@in-motion.net
BOONE
Contact: Paula Walker

35. Jennings County Step Ahead CCR&R
113 N. Jackson Street
North Vernon, IN 47265
Phone: (812) 346-9505
Fax: (812) 346-4505
Email: msteck@seidata.com (Marcia Speck)
JENNINGS
Contact: Marcia Speck

36. Johnson County Human Services, Inc.
400 Tracy Road
New Whiteland, In 46184
Phone: (317) 535-6361 or (888) 378-9467
Fax: (317) 535-6370
Email: Barb@shaw-inc.com
JOHNSON
Contact: Barb Shaw

37. Community Coordinated Child Care
825 University Woods Drive, Suite 1
New Albany, IN 47150
Phone: (812) 981-8134
Fax: (812) 981-8136
Email: voiceof4c@ntr.net
CLARK, FLOYD
Contact: Susan Vessels, Kimberly Chesser, Amanda Bergstedt (ext. 107)

Community Coordinated Child Care
1215 South 3rd Street
Louisville, KY 40203
Phone: (502) 636-1358
Fax: (502) 636-1488
Contact: Karen Hublar

38. Blue River Services, Inc.
405 N. Capitol Ave.
Corydon, IN 47112
Phone: (812) 738-2644
Fax: (812) 734-1000
Email: brccrrh@aye.net
HARRISON
Contact: Judy Hall, Holly Troncin,

Washington County CCRR
190 W. Becks Hill Road, Suite G
Salem, IN 47108
Phone: (812) 883-2604
Fax: (812) 883-2361
Email: brccrrw@aye.net
WASHINGTON
Contact: Desi Alexander

39. Pulaski County Human Services
P.O. Box 32
115 West Pearl Street
Winamac, IN 46996
Phone: (219) 946-6500
Fax: (219) 946-7271
Email: pchs@pwrtc.com
PULASKI
Contact: Adriane Parcel

40. River Valley Resources, Inc.
1025 Freeland Road
Greensburg, IN 47240
Phone: (812) 663-8597 or (800) 596-9273
Fax: (812) 662-6205
Email: RVR1@hsonline.net
DECATUR
Contact: Bev Phillips, Julie Himes, Michelle Duncan

River Valley Resources, Inc.
63 E. Washington, Suite B
Shelbyville, IN 46176
Phone: (317) 398-0592 or (877) 873-0558
Fax: (317) 398-2249
Email: RVRShelby@shelbynet.net
SHELBY
Contact: Susan Hood

41. Carroll County Child Care Choices
7392 West Division Line Road
Delphi, IN 46923
Phone: (765) 564-3746
Fax: (765) 379-3105
CARROLL
Contact:

42. Four Rivers Resource Services, Inc.
P.O Box 669
4 Courthouse Drive
Suite C
Shoals, IN 47581
Phone: (812) 247-2392
Fax: (812) 247-3616
Email: 4rivers@forrs.org
Web: 222.forrs.org
MARTIN
Contact: Sherry Davis
Denise Garrett Fax: (812) 247-2522

43. Jasper County Community Services
967 E. Leopold Street
Rennselaer, IN 47978
Phone: (219) 866-8071
Fax: (219) 866-5653
Email: stepahead@liljasper.com
JASPER
Contact: Pat Korniak, Marcella Lintner

44. Crawford County Extension Service
308 Oakhill Circle
P.O. Box 189
English, IN 47118
Phone: (800) 548-5375 ext. 252
Fax: (812) 338-3294
Web: www.cccr.net/~ccsac
CRAWFORD
Contact: Lou Ann Timberlake (812) 338-2352

45. Wells County Educare / CCRR
206 S. Main Street
Bluffton, IN 46714
Phone: (219) 824-2110 ext. 13
(219) 824-4026 (Home Office)
Email: childcare@adamswells.com
WELLS
Contact: Sandy Garcia

46. Montgomery County Child Care Coalition
P.O. Box 1274
Crawfordsville, IN 47933
Phone: (765) 362-6540
Fax: (765) 364-6986
Email: sixofus@tctc.com
MONTGOMERY
Contact: Susan Malott

47. Newton County Aging and Community Services
P.O. Box 140
106 E. State Street
Morroco, IN 47963
Phone: (219) 285-2246
Fax: (219) 285-6726
Email: nccoacsc@netnitco.net
NEWTON
Contact: Jackie Jennings

48. Randolph County YMCA
1521 E. Washington Street
Winchester, IN 47394
Phone: (765) 584-9645 or (877) 584-8800
Fax: (765) 584-1394
RANDOLPH
Contact: Pam Norris

7.3 LEAD

Indiana Department of Environmental Management
Office of Air Management, Asbestos/Lead Section
100 N. Senate Ave., 10th Floor
Indianapolis, IN 46206
(800) 451-6027, press 0 and ask for ext. 33861 or in Indianapolis call (317) 233-3861
For more information on lead-based paint rules and regulations and certified lead inspectors and abatement contractors.

Indiana Department of Environmental Management
Office of Water Management, Drinking Water Branch
2525 N. Shadeland Ave.
Indianapolis, IN 46219
Phone: (800) 451-6027, press 0 and ask for ext. 308-3282 or in Indianapolis call (317) 308-3282
For more information on lead in drinking water and to get your water tested.

IDEM IS OFFERING FREE LEAD RISK ASSESSMENTS TO CHILDCARE FACILITIES PARTICIPATING IN THE 5-STAR ENVIRONMENTAL RECOGNITION PROGRAM. ASSESSMENTS INCLUDE PAINT, WATER, SOIL, AND DUST SAMPLES.

FOR MORE INFORMATION, CALL (800) 988-7901.

Indiana State Department of Health
www.state.in.us/isdh
www.state.in.us/doh/html/labserv/certfr.htm
For lead in drinking water testing.

Indiana Family Helpline
(800) 433-0746
For lead in drinking water testing.

National Sanitation Foundation International (NSF)
(800) NSF-MARK
www.nsf.org
For more information on lead in drinking water and brass faucets.

Underwriters Laboratory (UL)
(847) 272-8800
www.ul.com
For more information on lead and brass faucets.

7.4 ASBESTOS

Indiana Department of Environmental Management
Office of Air Management, Asbestos/Lead Section
100 N. Senate Ave., 10th Floor
Indianapolis, IN 46206
(800) 451-6027, press 0 and ask for ext. 33861 or in Indianapolis call (317) 233-3861
Provides the latest lists of accredited asbestos inspectors and licensed asbestos contractors (lists are in the Appendix but must be updated frequently) *and will assist you in developing an asbestos management plan*.

7.5 RADON

Indiana State Department of Health
Radon Program Coordinator, Indoor and Radiologic Health
(800) 272-9723 or in Indianapolis call (317) 233-7563
For more information on radon, for state and U.S. EPA radon documents, or to obtain the most recent list of certified radon testers and mitigators.

National Safety Council
PO Box 33435
Washington, DC 20033-0435
(800) 557-2366
www.nsc.org/ehc/radon/coupon.htm
Provides a radon information hotline and radon test kit coupons for $9.95.

U.S. Environmental Protection Agency
(800) 438-4318
For up-to-date radon information and guidelines.

7.6 ASTHMA AND RESPIRATORY IRRITANTS

Contact your local health departments for more information on asthma and indoor air quality. See Health Departments in section 7.11.

National Institute for Occupational Safety and Health and the National Center for Infectious Diseases Centers for Disease Control and Prevention
(800) 356-4674
www.cdc.gov/ncidod/dbmd/fungal.htm

7.7 CARBON MONOXIDE

Consumer Products Safety Commission Hotline
(800) 638-2772
For more information on carbon monoxide detectors for home use.

National Institute for Occupational Safety and Health
(800) 356-4674
For more information on carbon monoxide detectors for commercial use.

7.8 MERCURY

See the list of mercury recyclers in the Appendix.

Fish Consumption Advisory
The Indiana State Department of Health can provide you with the most recent Indiana Fish Consumption Advisory and pamphlets for women and children. These brochures provide guidance on preparing and eating fresh fish caught in Indiana that may contain unsafe levels of mercury.

Indiana State Department of Health

2 North Meridian St.
Indianapolis, IN 46204
(317) 233-1325
www.state.in.us/isdh/dataandstats/fish/fish_99/fish_cvr.htm

7.9 PESTICIDES

Office of the Indiana State Chemist
Purdue University
1154 Biochemistry
West Lafayette, IN 47907
(765) 494-1594
Contact: David Scott, Administrator
To ensure your pest control operator is licensed and to obtain referrals for pest control operators that have been trained in integrated pest management strategies.

Purdue Pesticide Program
(765) 494-4566
For training and certification of staff to apply pesticides.

7.10 INDIANA SOLID WASTE MANAGEMENT DISTRICTS

Provide information on recycling options for solid and hazardous waste.

Indiana's solid waste management districts were formed in the early 90's to help the State reach its goal of 50% waste reduction at disposal facilities by the year 2001. Solid waste districts provide services for solid waste planning, household hazardous waste education and disposal, recycling, market development, education programs, and technical assistance.

Updated February 22, 2000

Guide to multi-county SWMDs		
		Clay, Owen & Vigo counties see Clay-Owen-Vigo SWMD
Grant, Madison & Delaware counties see East Central Indiana SWMD	Blackford, Jay & Wells counties see Mideast Indiana SWMD	DeKalb, Lagrange, Noble & Steuben counties see Northeast Indiana SWMD
Benton, Carroll, Jasper, Newton, Pulaski & White counties see Northwest Indiana SWMD	Franklin, Jefferson, Jennings, Ripley, Ohio, Scott & Switzerland counties see Southeastern Indiana SWMD	Fayette, Hancock, Henry & Rush counties see Three Rivers SWMD
Union & Wayne counties see W.U.R. SWMD	Hendricks, Montgomery, Morgan, Parke & Putnam counties see West Central Indiana SWMD	Clinton & Tippecanoe counties see Wildcat Creek SWMD

Adams County SWMD
Henry Mayer
3775 N. 200 East
Decatur, IN 46733
(219) 724-9971
(219) 724-8281 fax
acswmd@juno.com

Allen County SWMD
Tony Burrus
City-County Bdg., Rm. B-86
Fort Wayne, IN 46802
(219) 449-7878
(219) 449-7493
tony808@juno.com
www.acwastewatcher.com

Bartholomew County SWMD
Jim Murray
720 S. Mapleton Street
Columbus, IN 47201-7353
(812) 376-2614
(812) 376-2616
bcswmd@hsonline.net
bcswmd@hsonline.com

Boone County SWMD
David Lamm
B-10 Courthouse Square
P.O. Box 808
Lebanon, IN 46052
(765) 483-0687
(812) 483-0726
bcswmd@tds.net
www.bccn.boone.in.us/bcswmd/

Brown County SWMD
Michelle Cohen
176 Old State Rd. 46
P.O. Box 1308
Nashville, IN 47448
(812) 988-0140
(812) 988-1687
recycle@bcswmd.org

Cass County SWMD
Mike Fincher
502 High Street
Logansport, IN 46947
(219) 732-9253
(219) 732-1227
ccswmd@iquest.net
www.iquest.net/ccrecycle

Clark County SWMD
Sharon Marra
9208 Highway 62
Charlestown, IN 47111-8409
(812) 256-7942
(812) 256-4079
recycle@aye.net

Clay-Owen-Vigo County SWMD
Janet Reed
36 E. National Avenue
Brazil, IN 47834
(812) 443-0168 or (800) 387-3380
(812) 443-0168
janetcov@claynet.com

Crawford County SWMD
Tina Bowman
115 East Water Street
P.O. Box 359
Marengo, IN 47140
(812) 365-9419
(812) 365-9419
ccswd@netpointe.com

Daviess County SWMD
Lee Spaulding
Co. Rd. 650 E, Daviess Co.
Landfill
RR1, P.O. Box 312
Montgomery, IN 47558
(812) 486-3774
(812) 486-2787

Dearborn County SWMD
Tina Brunner
215-B W. High Street
Lawrenceburg, IN 47025
(812) 537-8757
(812) 537-6302
dcswmd@seidata.com

Decatur County SWMD
Norma Bainbridge
150 Courthouse Square, Suite 110
Greensburg, IN 47240-2051
(812) 663-0960
(812) 662-6024

Dubois County SWMD
Tommy Tomison
803 N. Van Buren Street
Huntingburg, IN 47542
(812) 683-8379
(812) 683-4319
duboiscoswmd@psci.net

East Central Indiana SWMD
Dean Smith
4911 North S.R. 9
Anderson, IN 46012
(765) 640-2535
(765) 640-2540
eciswd@netdirect.net

Elkhart County SWMD
Tim Neese
500 N. Nappanee St., Suite 10B
Elkhart, IN 46514
(219) 293-2269
(219) 293-1933
tneese@aol.com

Floyd County SWMD
Brad Marlow
County Annex North
3005 Grant Line Road
New Albany, IN 47150
(812) 948-4733
(812) 948-4712
fcswmd@aye.net
www.fcswmd.com

Fountain County SWMD
Keith Hughes
423 East Landfill Road
Veedersburg, IN 47987
(765) 294-2260
(765) 294-2258

Fulton County SWMD
Doug Oakes
1452 Wentzel St.
P.O. Box 721
Rochester, IN 46975-0721
(219) 223-4939
(219) 224-4939
fcswd@rtcol.com

Gibson County SWMD
John Maxey
800 S. Prince, Room 22
Princeton, IN 47670
(812) 385-3136
(812) 385-3428

Greene County SWMD
Jeff Myers
R.R. 1, Box 61A
Switz City, IN 47465-9720
(812) 659-3788 or (800) 281-1930
(812) 659-9955
greenesw@viaduct.custom.net
www.greenet.net/nonprofit/gcswd

Hamilton County SWMD
Barry McNulty
1 Hamilton Co. Square, #30
Noblesville, IN 46060-2229
(317) 776-8500
(317) 776-8506

Harrison County SWMD
Anna Morris
300 N. Capitol Ave.
Corydon, IN 47112
(812) 738-8415
(812) 738-8415

Howard County SWMD
Keith Fallon
120 E. Mulberry St., Room 106
Kokomo, IN 46901
(765) 456-2274
(765) 456-2418
keithj@iquest.net
www.co.howard.in.us/swmd

Huntington County SWMD
Steven Scheer
Courthouse, Room 419
201 North Jefferson St.
Huntington, IN 46750
(219) 358-4886
(219) 358-4886
sscheer1@huntington.in.us

Jackson County SWMD
LeRoy Crees
1220 W. Bloomington Rd.
P.O. Box 286
Brownstown, IN 47220-0286
(812) 358-4277
(812) 358-3556

Johnson County SWMD
Melinda Antell
18 West Jefferson St.
Franklin, IN 46131-2311
(317) 738-2546
(317) 738-2291
melinda@netdirect.net
www.co.johnson.in.us/swmd

Knox County SWMD
Pat Gratzek
2758C East Pine Hill Drive
Vincennes, IN 47591
(812) 895-4878
(812) 895-4881

Kosciusko County SWMD
Marsha Eikenberry
112 East Center Street
P.O. Box 1192
Warsaw, IN 46581-1192
(219) 372-3087 or (877) 288-4304
(219) 372-3088
kcswmd@kconline.com
government.kconline.com/kcswmd

LaPorte County SWMD
Lynn Waters
2354 North U.S. Hwy 35
LaPorte, IN 46350
(219) 326-0014
(219) 326-5310
vision@adsnet.com

Lake County SWMD
Jeffrey Langbehn
7820 Broadway
Merrillville, IN 46410
(219) 769-3820
(219) 769-3890
lcswmd@mail.icongrp.com
www.thetimesonline.com/org/lcswm

Lawrence County SWMD
Ron Walker
1221 J Street
Bedford, IN 47421
(812) 278-8845
(812) 278-9611

Marshall County SWMD
Mike Good
County Building
112 West Jefferson St., Room 306
Plymouth, IN 46563
(219) 935-8618 or (800) 935-8618
(219) 935-8612
mike@co.marshall.in.us
www.marshall/comm/gov/marshall
/solidwaste

Martin County SWMD
Laura Albertson
500 Industrial Park Drive
P.O. Box 343
Loogootee, IN 47553
(812) 295-4142
(812) 295-3253
lalbert@dmrtc.net
dmrtc.net/~lalbert/

Miami County SWMD
Brian Boyce
25 Court Street, Suite 305
P.O. Box 1323
Peru, IN 46970
(765) 472-7224
(765) 472-2511
boyceb@netusal.net

Mideast Indiana SWMD
Carter Leonard
1006 S. Knox Rd.
Dunkirk, IN 47336
(765) 768-6748
(765) 768-6582

Monroe County SWMD
Mike Frey
3400 Old State Road 37 South
Bloomington, IN 47401
(812) 349-2020
(812) 349-2872
www.mcswd.org

Northeast Indiana SWMD
Steve Christman
2320 West 800 South
P.O. Box 370
Ashley, IN 46705-0370
(219) 587-3063 or (800) 777-5462
(219) 587-3523
NISWMD@kuntrynet.com

Northwest Indiana SWMD
Marla Vechey
103B S. Main
P.O. Box 731
Monticello, IN 47960
(219) 583-5976 or (800) 856-0980
(219) 583-5437
nwiswd@pwrtc.com

Orange County SWMD
Donald Smelser
727 N. Greenbriar Drive
Paoli, IN 47454
(812) 723-3796
(812) 723-3996

Perry County SWMD
Karen Stonewall
Annex Building, Room 20
P.O. Box 98
Cannelton, IN 47520
(812) 547-9787
(812)547-0400
pcswd@psci.net
www.swmd.co.perry.in.us

Pike County SWMD
Susan Haislip
703 Main Street
Petersburg, IN 47567
(812) 354-2924
(812) 354-2687
shaislip@comsource.net

Porter County SWMD
Lance Hodge
Porter County Administrative Center
155 Indiana Avenue, Third Floor
Valparaiso, IN 46383
(219) 465-3696
(219) 465-3696
pcswmd@netnitco.net
www.pcsolidwaste.com

Posey County SWMD
Patricia Bunner Colbert
400 Brown Street
P.O. Box 248
Mt. Vernon, IN 47620
(812) 838-1613
(812) 838-3079

Randolph County SWMD
Merlin Haggard
215 S. Main Street
P.O. Box 443
Winchester, IN 47394
(765) 584-9816
(765) 584-9816
rcswmd@globalsite.net

Shelby County SWMD
Noell Krughoff
1110 Amos Road, Suite C
Shelbyville, IN 46176
(317) 392-1394, ext. 131
(317) 392-0739
noell-krughoff@iaswcd.org
shelbynet.net/~solidwaste

Southeastern Indiana SWMD
Tom Perotti
102 North Main St.
P.O. Box 166
Versailles, IN 47042
(812) 689-3525
(812) 689-3563

Spencer County SWMD
Deborah Steinkamp
918 E. County Road 800 North
Chrisney, IN 47611
(812) 362-7401
(812) 362-7650
recycle@psci.net

St. Joseph County SWMD
Paul Trost
Union Station
310 West South Street
South Bend, IN 46601
(219) 235-9971
(219) 235-9973
pet@swmd.org

Starke County SWMD
53 East Mound Street
P.O. Box 500
Knox, IN 46534
(219) 772-9118
(219) 772-9171

Sullivan County SWMD
Sandy Drake
2316 N. Section Street
Sullivan, IN 47882-1593
(812) 268-5157
(812) 268-0232

Three Rivers SWMD
Teresa Ross
148 E. US 52
P.O. Box 426
Rushville, IN 46173-0426
(765) 938-1055 or (800) 726-9278
(765) 938-1198
threerivers@comsys.net

Tipton County SWMD
Beth Hirtzel
119 W. Washington Street
Tipton, IN 46072-1646
(765) 675-9006
(765) 675-9516
recycle@tiptontel.com

Vanderburgh County SWMD
Joe Ballard
Civic Center Complex, Room 207
1 NW M. L. King Blvd.
Evansville, IN 47708-1847
(812) 436-7800
(812) 436-4926

Vermillion County SWMD
Ed Groves
Courthouse, E. Market
P.O. Box 296
Newport, IN 47966-0296
(765) 492-5014
(765) 492-5000

WUR SWMD
Amy Durham
823 South Round Barn Rd., Suite #1
Richmond, IN 47374
(765) 966-8219, ext. 110
(765) 966-0455
swcd@co.wayne.in.us
www.waste-not.org

Wabash County SWMD
Steve Johnson
111 S. Wabash
P.O. Box 256
Wabash, IN 46992-0256
(219) 563-7649
(219) 563-6920
WABSWMD@ctlnet.com
www.slashthetrash.com

Warren County SWMD
Pam Byers
425 W. Washington Street
Williamsport, IN 47993
(765) 762-1433
(765) 762-6182
warrency@tctc.com
www.tctc.com/~warrency

Warrick County SWMD
Bill Kavanaugh
1111 South Pelzer Rd.
Boonville, IN 47601-9369
(812) 897-6210
(812) 897-6209
warcoswmd@aol.com

Washington County SWMD
Mike Goering
Courthouse
Salem, IN 47167
(812) 883-3039
(812) 883-1933

West Central Indiana SWMD
1668 E. Main
P.O. Box 68
Danville, IN 46122
(317) 745-2491 or (800) 211-2750
(317) 745-0027
www.westcentralswd.com

Whitley County SWMD
Bill Grube
701 S. Line Rd.
Columbia City, IN 46725
(219) 244-5303
(219) 244-4243

Wildcat Creek SWMD
Dawn Boston
2780 North 9th Street
Lafayette, IN 47904-1053
(765) 423-2858
(765) 742-1261
wcswmd@gte.net

7.11 INDIANA COUNTY HEALTH DEPARTMENTS

Adams County Health Department
Norval S. Rich M.D.
313 W. Jefferson St., #314
Decatur, IN 46733-1672
Phone: (219) 724-2600
Fax: (219) 724-2708

Allen County Health Department
Jane M. Irmscher, M.D.
City-County Building
One E. Main St.
Fort Wayne, IN 46802-1810
Phone: (219) 449-7561
Fax: (219) 427-1391

Bartholomew County Health Department
Environmental Health & Vital Records Div.
Walter H. DeArmitt, M.D.
440 Third St., Suite 303
Columbus, IN 47201-6798
Phone: (812) 379-1550
Fax: (812) 379-1040

Benton County Health Department
Don McKinney, M.D.
Courthouse, Suite 15
706 E. Fifth St.
Fowler, IN 47944-1556
Phone: (765) 884- 1728
Fax: (765) 884-2013

Blackford County Health Department
George O. Parks
503 E. Van Cleve St.
Hartford City, IN 47348-1897
Phone: (765) 348-4317
Fax: (765) 348-3041

Boone County Health Department
Jack Porter II, M.D.
416 W. Camp St.
Lebanon, IN 46052-1796
Phone: (765) 482-3942
Fax: (765) 483-4450

Brown County Health Department
Robert M. Seibel, M.D.
County Office Building
P.O. Box 281
Nashville, IN 47448-0281
Phone: (812) 988-2255
Fax: (812) 988-5601

Carroll County Health Department
T. Neal Petry, M.D.
Courthouse, 101 W. Main
Delphi, IN 46923-1566
Phone: (765) 564-3420
Fax: (765) 564-6161

Cass County Health Department
Frederick A. Hillis, M.D.
200 Court Park-Government Building
Logansport, IN 46947-3147
Phone: (219) 753-7760
Fax: (219) 753-7039

Clark County Health Department
Kevin R. Burke, M.D.
1216 Akers St.
Jeffersonville, IN 47130-3719
Phone: (812) 282-7521
Fax: (812) 282-2711

Clay County Health Department
S. Rahim Farid, M.D.
Courthouse, 609 E. National Ave.
Brazil, IN 47834-2659
Phone: (812) 448-9021
Fax: (812) 448-9018

Clinton County Health Department
Stephen D. Tharp, M.D.
211 N. Jackson St.
Frankfort, IN 46041-1936
Phone: (765) 659-6385
Fax: (765) 659-6391

Crawford County Health Department
Devi K. Pierce, M.D.
306 Oak Hill Circle
P.O. Box 246
English, IN 47118-0246
Phone: (812) 338-2302
Fax: (812) 338-2301

Daviess County Health Department
Robert H. Rang, M.D.
Courthouse, 200 E. Walnut
Washington, IN 47501-2794
Phone: (812) 254-8667
Fax: (812) 254-8688, ext. 249

Dearborn County Health Department
Gary E. Scudder, M.D.
Dearborn County Admin. Building.
215-B W. High St.
Lawrenceburg, IN 47025-1910
Phone: (812) 537-8826
Fax: (812) 537-1852

Decatur County Health Department
Mostafa Daftary, M.D.
801 N. Lincoln St.
Greensburg, IN 47240-1397
Phone: (812) 663-8301
Fax: (812) 663-4174

Dekalb County Health Department
Mark S. Souder
Dekalb County Office Building
215 E. Ninth, Suite 201
Auburn, IN 46706-2336
Phone: (219) 925-2220
Fax: (219) 925-2090

Delaware County Health Department
Donna A. Wilkins, M.D.
Delaware County Building
100 W. Main St., Rm 207
Muncie, IN 47305-2874
Phone: (765) 747-7721
Fax: (765) 284-1875

Dubois County Health Department
Thomas Gootee, M.D.
Courthouse Annex, Second Floor
602 Main St.
Jasper, IN 47546-3032
Phone: (812) 481-7050
Fax: (812) 481-7069

E. Chicago Health Department
Timothy Raykovich, M.D.
3903 Indianapolis Blvd.
E. Chicago, IN 46312-2596
Phone: (219) 391-8467
Fax: (219) 391-8494

Elkhart County Health Department
Frederick W. Bigler, M.D.
117 N. Second St., Room 112
Goshen, IN 46526-3231
Phone: (219) 535-6786
Fax: (219) 533-4431

Fayette County Health Department
Wayne B. White, M.D.
111 W. Fourth St.
Connersville, IN 47331-1901
Phone: (765) 825-4013
Fax: (765) 825-7189

Floyd County Health Department
Everett Bickers, M.D.
1917 Bono Road
New Albany, IN 47150-4607
Phone: (812) 948-4726
Fax: (812) 948-2208

Fountain-Warren County Health Department
Atee Salvo, M.D.
210 S. Perry St.
Attica, IN 47918-1352
Phone: (765) 762-3035
Fax: (765) 762-6520

Franklin County Health Department
Joanne Guttman, M.D.
Courthouse, 459 Main St.
Brookville, IN 47012-1405
Phone: (765) 647-4322
Fax: (765) 647-3224

Fulton County Health Department
J.D. Richardson, M.D.
1009 W. Third St.
Rochester, IN 46975-7119
Phone: (219) 223-2881
Fax: (219) 223-2335

Gary Health Department
Adolphus A. Anekwe, M.D.
1145 W. Fifth St.
Gary, IN 46402-1795
Phone: (219) 882-5565
Fax: (219) 882-8213

Gibson County Health Department
William E. Dye, M.D.
Courthouse Annex
800 S. Prince St.
Princeton, IN 47670-2664
Phone: (812) 385-3831
Fax: (812) 386-8027

Grant County Health Department
Environmental Health & Vital Records Division
Calvin Russell, M.D.
Courthouse Complex
401 S. Adams St.
Marion, IN 46953-2031
Phone: (765) 651-2404
Fax: (765) 651-2419

Greene County Health Department
Frederick R. Ridge, M.D.
Courthouse, Room GO4
Bloomfield, IN 47424-1469
Phone: (812) 384-4496
Fax: (812) 384-2037

Hamilton County Health Department
Barry McNulty, REHS
One Hamilton County Square, Suite 30
Noblesville, IN 46060-2229
Phone: (317) 776-8500
Fax: (317) 776-8506

Hammond City Health Department
Franklin F. Premuda, M.D.
649 Conkey St. East
Hammond, IN 46324-1101
Phone: (219) 853-6358
Fax: (219) 853-6403

Hancock County Health Department
William R. Rhynearson, M.D.
Courthouse, Room 105
9 E. Main St.
Greenfield, IN 46140-2320
Phone: (317) 462-1125
Fax: (317) 462-1154

Harrison County Health Department
Rashidul Islam, M.D.
245 Atwood St., N. Wing
Corydon, IN 47112-8402
Phone: (812) 738-3237
Fax: (812) 738-4292

Hendricks County Health Department
Environmental Health Department
David Hadley, M.D.
355 S. Washington St.
P.O. Box 310
Danville, IN 46122-0310
Phone: (317) 745-9217
Fax: (317) 745-9218

Henry County Health Department
Helen Steussy, M.D.
1207 Race St.
New Castle, IN 47362-4626
Phone: (765) 521-7058
Fax: (765) 521-7055

Howard County Health Department
Alan J. Adler, M.D.
120 E. Mulberry, Room 210
Kokomo, IN 46901-4657
Phone: (765) 456-2408
Fax: (765) 456-2417

Huntington County Health Department
Thomas Ringenberg, D.O.
Courthouse, Room 205
Huntington, IN 46750-2868
Phone: (219) 358-4831
Fax: (219) 358-4823

Jackson County Health Department
Joseph M. Black, M.D.
207 N. Pine St.
Seymour, IN 47274-2143
Phone: (812) 522-6474
Fax: (812) 522-6488

Jasper County Health Department
Michael Louck, M.D.
105 W. Kellner Blvd.
Rensselaer, IN 47978-2623
Phone: (219) 866-4917
Fax: (219) 866-4108

Jay County Health Department
Eugene M. Gillum, M.D.
Courthouse, 120 N. Court St.
Portland, IN 47371-2116
Phone: (219) 726-8080
Fax: (219) 726-2220

Jefferson County Health Department
H. Schirmer Riley, M.D.
715 Green Road
Madison, IN 47250-2143
Phone: (812) 273-1942
Fax: (812) 273-1955

Jennings County Health Department
Louis J. Calli, M.D.
Courthouse Annex
P.O. Box 323
Vernon, IN 47282-0323
Phone: (812) 346-2774
Fax: (812) 346-1660

Johnson County Health Department
Division of Environmental Health
Craig Moorman, M.D.
Courthouse Annex, 86 W. Court St.
Franklin, IN 46131-2345
Phone: (317) 736-3770
Fax: (317) 736-5264

Knox County Health Department
Ralph J. Jacqmain, M.D.
624 Broadway St.
Vincennes, IN 47591-2091
Phone: (812) 882-8080
Fax: (812) 882-5625

Kosciusko County Health Department
William L. Remington, M.D.
Courthouse, Third Floor, Rm. 2
100 W. Center St.
Warsaw, IN 46580-2877
Phone: (219) 372-2349
Fax: (219) 269-2023

LaGrange County Health Department
T. Anthony Pechin, M.D.
114 W. Michigan St.
LaGrange, IN 46761-1860
Phone: (219) 463-7832
Fax: (219) 463-7835

Lake County Health Department
Alexander S. Williams, M.D.
2293 N. Main St.
Crown Point, IN 46307-1896
Phone: (219) 755-3655
Fax: (219) 755-3668

LaPorte County Health Department
Kumud Aggarwal, M.D.
County Complex, 4th Floor
809 State St.
LaPorte, IN 46350-3329
Phone: (219) 326-6808, ext. 200
Fax: (219) 326-6808, ext. 203

Lawrence County Health Department
Donald M. Kerr, M.D.
Bedford Plaza
2419 Mitchell Road
Bedford, IN 47421-4731
Phone: (812) 275-3234
Fax: (812) 275-1094

Madison County Health Department
Richard H. Shafer, M.D.
Madison County Government Center
16 E. Ninth St.
Anderson, IN 46016-1582
Phone: (765) 641-9524
Fax: (765) 641-9691

Marion County Health Department
Environmental Health
Virginia A. Caine, M.D.
3838 N. Rural St.
Indianapolis, IN 46205-2930
Phone: (317) 541-2000
Fax: (317) 541-2370

Marshall County Health Department
Byron M. Holm, M.D.
112 W. Jefferson St., Room 103
Plymouth, IN 46563-1764
Phone: (219) 935-8565
Fax: (219) 936-9247

Martin County Health Department
Larry Sutton, DO
P.O. Box 239
Shoals, IN 47581-0368
Phone: (812) 247-2273
Fax: (812) 247-2210

Miami County Health Department
Neil J. Stalker, M.D.
Courthouse, Room 110
Peru, IN 46970-2245
Phone: (765) 472-3901
Fax: (765) 472-1412

Monroe County Health Department
Thomas W. Sharp, M.D.
119 W. Seventh St.
Bloomington, IN 47404-3989
Phone: (812) 349-2542
Fax: (812) 339-6481

Montgomery County Health Department
Carl B. Howland, M.D.
307 Binford St., Suite 100
Crawfordsville, IN 47933-1802
Phone: (765) 364-6440
Fax: (765) 364-6404

Morgan County Health Department
Robert C. Beesley, M.D.
180 S. Main St., Suite 252
Martinsville, IN 46151
Phone: (765) 831-5136
Fax: (765) 831-5136

Newton County Health Department
John C. Parker, M.D.
210 E. State St.
P.O. Box 139
Morocco, IN 47963-0139
Phone: (219) 285-2052
Fax: (219) 285-8535

Noble County Health Department
Gerald Warrener, M.D.
2090 N. State Road 9, Suite C
Albion, IN 46701-9566
Phone: (219) 636-2191
Fax: (219) 636-2192

Ohio County Health Department
Gordon S. Fessler, M.D.
515 Second St.
Rising Sun, IN 47040-1060
Phone: (812) 438-2551
Fax: (812) 438-4393

Orange County Health Department
Curtis C. Thill, M.D.
205 E. Main St.
Paoli, IN 47454-1591
Phone: (812) 723-3600, ext. 112
Fax: (812) 723-4196

Owen County Health Department
B. Diane Wells, M.D.
Courthouse, First Floor
Spencer, IN 47460-1791
Phone: (812) 829-5017
Fax: (812) 829-5045

Parke County Health Department
Richard S. Bloomer, M.D.
Courthouse, Room 10
116 W. High
Rockville, IN 47872-1784
Phone: (765) 569-6665
Fax: (765) 569-1917

Perry County Health Department
Stephen E. Syler, M.D.
Courthouse Annex
Cannelton, IN 47520-1251
Phone: (812) 547-2746
Fax: (812) 547-0415

Pike County Health Department
Joseph W. Elbert, D.O.
Courthouse, 801 Main St.
Petersburg, IN 47567-1298
Phone: (812) 354-8796
Fax: (812) 354-8028

Porter County Health Department
Gary A. Babcoke, M.D.
155 Indiana Ave., Suite 104
Valparaiso, IN 46383-5502
Phone: (219) 465-3525
Fax: (219) 465-3531

Posey County Health Department
Herman Hirsch, M.D.
Coliseum Building
126 E. Third St.
Mount Vernon, IN 47620-1811
Phone: (812) 838-1328
Fax: (812) 838-8561

Pulaski County Health Department
Rex A. Allman, M.D.
Pulaski Co. Building, Suite 205
125 S. Riverside Drive
Winamac, IN 46996-1528
Phone: (219) 946-6080
Fax: (219) 946-6654

Putnam County Health Department
John Ellett Jr., M.D.
Courthouse, Fourth Floor
Greencastle, IN 46135-1502
Phone: (765) 653-5210
Fax: (765) 653-0211

Randolph County Health Department
Jerome M. Leahey, M.D.
211 S. Main St.
Winchester, IN 47394-1824
Phone: (765) 584-1155
Fax: (765) 584-9059

Ripley County Health Department
David J. Welsh, M.D.
107 N. Washington St.
P.O. Box 423
Versailles, IN 47042-0423
Phone: (812) 689-5751
Fax: (812) 689-3909

Rush County Health Department
D.W. Ellis, M.D.
Courthouse, Room 5
Rushville, IN 46173-1854
Phone: (765) 932-3103
Fax: (765) 932-2357

St. Joseph County Health Department
George B. Plain, M.D.
County-City Building, Floor #8
227 W. Jefferson Blvd.
S. Bend, IN 46601-1870
Phone: (219) 235-9750
Fax: (219) 235-9960

Scott County Health Department
R. Kevin Rogers, M.D.
1471 N. Gardner St.
Scottsburg, IN 47170-7751
Phone: (812) 752-8455
Fax: (812) 752-6023

Shelby County Health Department
Wilson L. Dalton, M.D.
40 Howard St.
Shelbyville, IN 46176-2617
Phone: (317) 392-6470
Fax: (317) 392-6472

Spencer County Health Department
Susan M. Martin, M.D.
Courthouse, First Floor
Main St.
Rockport, IN 47635-1492
Phone: (812) 649-4441
Fax: (812) 649-6047

Starke County Health Department
Walter Fritz, M.D.
Courthouse, First Floor
53 E. Mound St.
Knox, IN 46534-1148
Phone: (219) 772-9137
Fax: (219) 772-6900

Steuben County Health Department
Ted Crisman, M.D.
Community Center
317 S. Wayne St., Suite 3-A
Angola, IN 46703-1938
Phone: (219) 668-1000, ext. 1500
Fax: (219) 665-1418

Sullivan County Health Department
Ernest Steven DuPre, M.D.
102 N. Section St.
Sullivan, IN 47882-1235
Phone: (812) 268-0224
Fax: (812) 268-0423

Switzerland County Health Department
Noel S. Graves, M.D.
211 E. Main St.
P.O. Box 14
Vevay, IN 47043-0014
Phone: (812) 427-3220
Fax: (812) 427-3246

Tippecanoe County Health Department
Wendell Riggs, M.D.
20 N. Third St.
Lafayette, IN 47901-1211
Phone: (765) 423-9221
Fax: (765) 423-9154

Tipton County Health Department
Glen Leer, D.O.
1000 S. Main St.
Tipton, IN 46072-1901
Phone: (765) 675-8741
Fax: (765) 675-6952

Union County Health Department
Shiv Kapoor, M.D.
26 W. Union, Room 11
Liberty, IN 47353-1350
Phone: (765) 458-5393
Fax: (765) 458-5582

Vanderburgh County Department of Health
John A. Heidingsfelder, M.D.
One N.W. Martin Luther King Blvd.
Evansville, IN 47708
Phone: (812) 435-5695
Fax: (812) 435-5612

Vermillion County Health Department
John E. Albrecht, M.D.
825 S. Main St.
Clinton, IN 47842-2201
Phone: (765) 832-3622
Fax: (765) 832-3684

Vigo County Health Department
Wayne Crockett, M.D.
201 Cherry St.
Terre Haute, IN 47807-2986
Phone: (812) 462-3428
Fax: (812) 234-1010

Wabash County Health Department
William D. Dannacher, M.D.
Memorial Hall, 89 W. Hill
Wabash, IN 46992-3184
Phone: (219) 563-0661, ext. 51
Fax: (219) 563-3451

Warrick County Health Department
Noel Martin, M.D.
215 S. First St.
Boonville, IN 47601-1701
Phone: (812) 897-6105
Fax: (812) 897-6104

Washington County Health Department
Eddie R. Apple, M.D.
Courthouse Annex, 35 Public Square
Salem, IN 47167-2054
Phone: (812) 883-5603
Fax: (812) 883-5017

Wayne County Health Department
Division of Environmental Health
David Keller, M.D.
Administrative Building
401 E. Main St.
Richmond, IN 47374-4288
Phone: (765) 973-9245
Fax: (765) 973-9250

Wells County Health Department
Donald A. Dian, M.D.
223 W. Washington St.
Bluffton, IN 46714-1955
Phone: (219) 824-6489
Fax: (219) 824-8803

White County Health Department
James C. Balvich, M.D.
Courthouse Basement
P.O. Box 838
Monticello, IN 47960-0838
Phone: (219) 583-8254
Fax: (219) 583-1513

Whitley County Health Department
Thomas G. Hamilton, M.D.
101 W. Market, Suite A
Columbia City, IN 46725-2311
Phone: (219) 248-3121
Fax: (219) 248-3129

7.12 FIRE PROTECTION AND SAFETY

Fire & Building Services
Office of the State Fire Marshal
Indiana Government Center South
402 W. Washington St., Room E241
Indianapolis, IN 46204-2739
/www.state.in.us/sema/osfm.html
Phone: (317) 232-2222 or (800) 423-0765
Fax: (317) 233-0307
For questions on Indiana fire and building codes and any other fire safety information.

National Fire Protection Association
1 Batterymarch Park
PO Box 9101
Quincy, MA 02269-9101
(617) 770-3000
Customer Services Order Telephone: (800) 344-3555

Provides fire protection information and activities for children, including "Sparky's® Activity Book." These fun activities should be supplemented with explanations of the lessons they provide. Contact your local fire department for more information.

7.13 UNIVERSAL PRECAUTIONS

Indiana State Department of Health
Communicable Diseases Division
(317) 233-7125
For questions on bloodborne pathogens and other communicable diseases.

Indiana Occupational Safety and Health Administration
Indiana Department of Labor
402 W. Washington St., Room W195
Indianapolis, IN 46204
(317) 232-2693
www.state.in.us/dol
For information on Occupational Safety and Health Administration (OSHA) requirements, including Universal Precautions and Bloodborne Pathogens.

Bureau of Safety, Education and Training
Indiana Department of Labor
402 W. Washington St., Room W195
Indianapolis, IN 46204
(317) 232-2688
For free and confidential assistance regarding Occupational Safety and Health Administration (OSHA) requirements.

7.14 HAZARDOUS CHEMICALS

Indiana Poison Center: (800) 382-9097
For any kind of poisoning consultation.

Indiana Department of Environmental Management Spill Line: (888) 233-7745
For hazardous chemical spills.

7.15 ENERGY EFFICIENCY

Energy-Rated Homes
1845 W. 18th St.
Indianapolis, IN 46202
(317)638-4232, fax:(317) 634-7947
www.erha.com/midwest
Not-for-profit organization that provides home energy ratings at time of sale, can roll cost of improvements into mortgage. Fee ranges from $200 to $400.

Energy Efficiency and Renewable Energy Network
U.S. Department of Energy
(800) DOE-EREC
Can help evaluate your insulation levels.

7.16 RECYCLING

See Solid Waste Management Districts in Section 7.10 above for assistance in setting up a recycling program for your facility.

Indiana Department of Environmental Management
Office of Pollution Prevention and Technical Assistance
(800) 451-6027, press 0 and ask for ext. 28172 or call (317) 232-8172 in Indianapolis
www.state.in.us/idem/oppta
For source reduction and recycling assistance.

Indiana Department of Commerce
(800) 382-4631 or (317) 232-8940
*To receive **Buy Recycled Indiana!,** a guide to start and expand recycled product purchasing in Indiana. Free to businesses.*

Indiana Recycling Coalition
(317) 283-6226
Contact: Janet Fox Neltner, Executive Director
email: recyclin@in.net
www.indianarecycling.org/
Supports source reduction, reuse, and recycling activities in Indiana.

Recycling Data Management Corp.
The Official Recycled Products Guide
PO Box 577
Ogdensburg, NY 13669
(800) 267-0707
www.recyclingdata.com
To purchase recycled products.

7.17 ENVIRONMENTAL EDUCATION

U.S. Environmental Protection Agency: Publications
Office of Public Affairs
U.S. EPA Region 5
77 W. Jackson Blvd.
Chicago, IL 60604
www.epa.gov/region5/enved/library.html
Offers numerous publications for children's environmental education; allow 2-3 weeks for delivery.

GEMS Leadership Training
Douglas Center for Environmental Education
Lake County Solid Waste Management District
7800 Broadway
Merrillville, IN 46410
Contact: Becky Barloga
(219) 938-8221 or (219) 769-3820, ext. 26
Training, curriculum, and resource materials for teachers to instruct on environmental topics.